KAWAI

XR9000/7000

Digital Electronic Organ

Owner's Manual

THANK YOU...

FOR RECOGNIZING THE QUALITY WHICH IS KAWAI. WE'RE PROUD YOU'VE CHOSEN THE XR SERIES ORGAN. YOU HAVE PURCHASED THE ORGAN THAT HAS THE REPUTATION FOR THE HIGHEST QUALITY AND THE RICHEST TONE IN THE INDUSTRY TODAY.

WE WISH YOU MANY HOURS OF MUSICAL FULFILLMENT AND FUN . . . ENJOY!

KAWAI XR MAIN FEATURES . . .

- RICH TIBIA DRAWBARS . . . THE BASIS OF THE KAWAI XR ORGAN IS THE UNIQUE TIBIA DRAWBARS. PRODUCING MILLIONS OF TONAL COMBINATIONS, THE TIBIA DRAWBARS ALLOW YOU TO CUSTOMIZE ORGAN TONES TO YOUR COMPLETE SATISFACTION TO SUIT YOUR EVERY MUSICAL MOOD.
- REALISTIC PIANO AND ORCHESTRAL SOUNDS WITH "ADD II" ... BOTH XR MODELS FEATURE, KAWAI'S NEW "ADD II" TONE GENERATION SYSTEM (ADDITIVE DIGITAL DYNAMICS). FROM THE HAUNTING SOUNDS OF THE FLUTE, THE RUMBLING TIMPANI TO THE KAWAI 9'1" CONCERT GRAND PIANO, KAWAI GIVES YOU UNRIVALED SOUND QUALITY.
- 32 ON BOARD AUTO PATTERN ORCHESTRAS (A.P.O.) FROM THE "WALTZ", "GOOD N' COUNTRY", TO THE REALISM OF THE "PARADE" YOUR XR WILL MATCH YOU MUSICAL MOODS AND EVEN CREATE SOME NEW ONES.
- PRESET PISTONS . . . 14 IN ALL, ALLOWING YOU TO SAVE YOUR FAVORITE SETTINGS AND EVEN TRANSFER THEM TO A DISK
- DISK PLAYER/RECORDER SYSTEM . . . THIS EASY TO OPERATE SYSTEM IS AS SIMPLE AS OPERATING YOUR CASSETTE RECORDER IT EVEN FEATURES PUNCH IN AND OUT WITH THE FURTHER CAPABILITY OF STEP TIME RECORDING.
- CONSTANT MONITOR MULTI DISPLAY . . . THROUGH A COLOR DISPLAY OF CHORDS AND OTHER EVENTS, AND A LETTER/CHARACTER DISPLAY YOUR PLAYING BECOMES EASIER WHEN YOU ARE MADE AWARE OF THE STATUS OF THE VARIOUS SECTIONS OF THE INSTRUMENT.
- **DIGITAL EFFECTS** . . . IN ADDITION TO DIGITAL REVERB, YOUR NEW XR FEATURES ADJUSTABLE PARAMETERS FOR TREMOLO, DELAY, FLANGER, CELESTE, ENSEMBLE, SUSTAIN, OCTAVE SHIFT (16', 8', 4') AND VARIABLE TOUCH SENSITIVITY. ALL ARE CONTINUOUSLY VARIABLE AND INDEPENDENTLY CONTROLLED IN EACH SECTION.
- FX PRO . . . BEGINNER OR ADVANCED PLAYER? MAKES NO DIFFERENCE. WITH FX PRO YOU CAN CREATE SOUNDS AND SOUND EFFECTS WHICH ALLOW YOU TO UTILIZE YOUR NEW XR TO THE FULLEST.
- ONE, TWO PLAY . . . AS IN ALL KAWAI KEYBOARD PRODUCTS, ONE, TWO, PLAY IS THE MOST ASKED FOR AND USED FEATURE. ONE, TWO, PLAY ALLOWS YOU TO CHOOSE A STYLE OF MUSIC WITH THE PROPER SETTING FOR THE ENTIRE ORGAN WITH THE FLICK OF A BUTTON.

Care of the Floppy Disk

A floppy disk is used for storing data in this product. When using a floppy disk, observe the following precautions.

• This model uses 3.5 inch 2DD floppy disks. Other types of disks cannot be used.

• Do not open the floppy disk's shutter. If the shutter is opened by hand, the interior of the disk may be damaged or foreign matter may enter, causing incorrect storage of data.



• Do not place near a magnetic source. The floppy disk uses magnetism to store data. If the disk is placed near a speaker or other magnetic source, the stored data may not be read back correctly.



IMPORTANT NOTE: Do not remove the floppy disk when the lamp of the floppy disk slot is on. If it is removed, not only may the data be lost, but permanent damage may result to the organ.

Write Protect

The purpose of the square window on the lower edge of floppy disk is to prevent data from being written over. When the window is closed, data may be written to the disk. When it is open, data writing is impossible.

Leave the window open on disks whose contents are not to be written over or deleted.



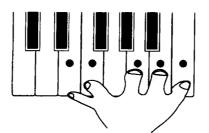
Inserting and removing the Floppy Disk

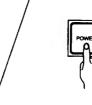
With the label facing up, insert the floppy disk into the slot until it clicks into place. Slowly press the Eject switch to remove the disk.



Notes: Resetting of internal memory

• The contents of the internal memory (such as Registration, Effects, User Patterns) are reset by turning on the POWER while holding down the E, F, A, B and C keys within the highest octave of the UPPER keyboard.





IMPORTANT SAFETY INSTRUCTIONS

WARNING – When using electric products, basic precautions should always be followed, including the following:

- 1. Read all the instructions before using.
- 2. Do not use this product near water for example, near a bathtub, in a wet basement, or near a swimming pool, etc.



- 3. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high level. If you experience any hearing loss or ringing in the ears, you should consult your doctor.
- 4. The product should be positioned so as not to interfere with its proper ventilation.
- 5. The product should be located away from heat sources such as radiators, heat registers, or other devices that produce heat.
- 6. The product should be connected to a power supply only of the type described in the operating manual or as marked on the product.
- 7. This product may be equipped with a polarized line plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet.
- 8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
- 9. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 10. The product should be serviced by authorized Kawai Dealer.
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into product; or



C. The product has been exposed to rain; or



- D. The product does not appear to operate normally; or
- E. The product has been damaged.
- 11. Do not disassemble or attempt to modify the product. In any manner, doing so will void the warranty.

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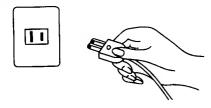
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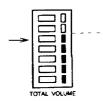
Product Features and Controls

POWER switch



The POWER switch turns the keyboard's power on and off.

TOTAL VOLUME switch



Controls the total organ volume.

REVERB switch

Add varying degrees of reverberation (echo) to the instrument.

UPPER MANUAL ORCHESTRA I, II (ORCHESTRA II XR9000 only) CONTROL SECTION

These tabs engage the upper keyboard orchestra section.

UPPER MANUAL TIBIA CONTROL SECTION

These tabs engage the upper keyboard Tibia Drawbar/Percussion section.

• UPPER MANUAL SYNTHESIZER CONTROL SECTION (I, II XR9,000 – 7,000 only I)

These tabs control the tone and volume setting combinations for the upper keyboard synthesizer section.

TEMPO/DATA INCREMENT DIAL

This normally shows the speed of the rhythm unit but changes to other functions during programming and adjustment.

TEMPO DISPLAY

This dial can be used to control changes in rhythm accompaniment tempo.

UPPER/LOWER MANUAL PRESET INSTRUMENT CONTROL SECTION

These tabs engage the solo, upper, and lower keyboard preset instrument section.

LOWER MANUAL ORCHESTRA CONTROL SECTION

These tabs engage the lower keyboard orchestra section.

LOWER MANUAL TIBIA CONTROL SECTION

This tab engages the lower keyboard tibia drawbar section.

PROGRAM REGISTRATION SECTION

This tab engages the storage and retrieval of tone, rhythm, volume and other settings.

EFFECT SECTION

This tab engages the effect settings for the upper and lower keyboards.

KEYBOARD CONDUCTOR SECTION

AUTO PLAY ORCHESTRA SECTION

These tabs control the tone, volume and features of the organ's auto accompaniment.

PEDAL CONTROL TABS

These tabs engage the tone, volume and effect setting combinations for the pedal keyboard section.

MIDI JACKS

These provide standard connections to other MIDI instrument and/or computers.

FRONT PANEL JACKS

These allow you to connect a headphone, home stereo and other audio equipment to the organ.

MULTIPHONIC OUT

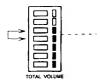
It provides the same signal output as Multiphonic speakers inside the organ for a surrounding sound.

MIC INPUT

You can use a microphone while playing the organ. To control the volume, regulate the dial control VOLUME.

Getting Ready to Play

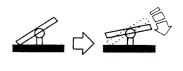
- 1. Insert the plug end of the AC power cord into the outlet.
- 2. Press the power switch to turn the unit on. (When there is no disk in the disk drive, Display 7 will show the following message: set XR disk)
 Volume Adjustment
- 3. Set the TOTAL VOLUME switches at mid range of volume. Note: All volume controls on your XR9000/7000 feature a convenient set of tiny instantaneously acting electronic switches, placed vertically on each volume control. The switch at the bottom of the control will produce the softest volume. As you press the switch higher up on the control the volume will increase. When two adjacent switches are pressed at the same time, the volume is set to the mid point between the levels by the two switches.



4. Depress the expression pedal halfway

This pedal controls the volume of the organ's overall volume.





During a performance, use of this pedal adds dynamic levels.

Note: About the unit's internal memory

The XR series organ is equipped with a back-up battery to maintain data in memory even when the power is turned off. This battery has a lifetime of ten years although this can depend somewhat on operating conditions. When the back-up battery begins to run down, the WRITE piston in the REGISTRATION MEMORY section blinks several times when you turn the power on. You cannot back up the internal memory once the back-up battery has run out of power. For a replacement of back-up battery, contact your authorized KAWAI Dealer.

Kawai maintains a policy of continuous improvement and reserves the right to change models and specifications without notice or liability.

CHAPTER 1 PLAY MODE

About the Modes

The XR series organ has the following three modes.

1. PLAY MODE

When you turn the power switch on, you are in this mode. You can play keyboards with an automatic accompaniment. You can also make full use of the sequencer or MIDI features.

2. EDIT MODE

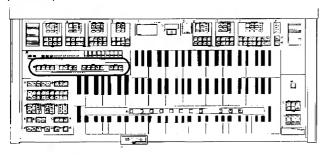
You can edit effects or auto-accompaniment.

3. SETUP MODE

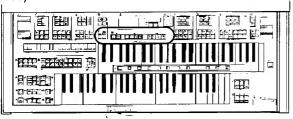
Tuning, Transposition, etc, or operate DISK DRIVE operations may be performed in this mode.

1 KEYBOARD CONDUCTOR

(XR9000)



(XR7000)

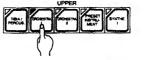


The XR9000 has four keyboards (SOLO, UPPER, LOWER, and PEDAL). The XR7000 has three keyboards (UPPER, LOWER, and PEDAL). Occasionally a particular piece requires several changes of tone and volume during the course of performance. Frequently, these changes come in groups of three or more. The KEYBOARD CONDUCTOR section provides the controls necessary to implement these changes with the minimum of effort. By pressing the appropriate tab in the KEYBOARD CONDUCTOR section, the tab will light and that particular registration is engaged.

You can turn off all the tabs in the LOWER and PEDAL (XR9000 pedal only) keyboards sections, or you can combine more than one of these tabs when using Authorized Pattern Orchestra (A.P.O.).

Ex. UPPER KEYBOARD: To change from TIBIA/PERCUS. to ORCHESTRA.

(1) Pressing the ORCHESTRA I (ORCHESTRA on XR7000) tab turns off the TIBIA/PERCUS tab and the appropriate lamp is lighted.

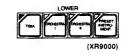


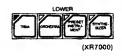


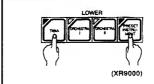
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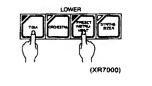
Ex. LOWER KEYBOARD: To add PRESET INSTRUMENT to the TIBIA.

(1) While holding down the TIBIA tab, press the PRESET INSTRUMENT tab. The lamps of both tabs will light up.

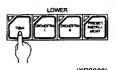


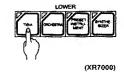






Ex. UPPER KEYBOARD: To turn off the TIBIA.

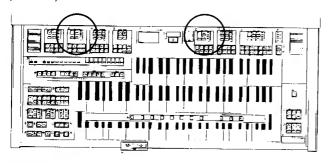




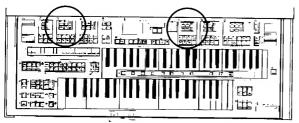
(1) Press the TIBIA tab to turn off the switch tab. NOTE: You can turn off the LOWER or PEDAL (XR9000 pedal only) keyboard section by pressing the currently selected tab.

2 ORCHESTRA

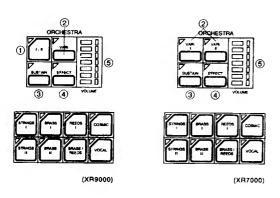
(XR9000)



(XR7000)



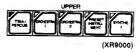
The XR Series offers a choice of two sections, ORCHESTRA I and II (XR9000 only, XR7000 one) for the UPPER and LOWER keyboards and one PEDAL ORCHESTRA section.

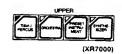


- 1 I/II(XR9000 only): Switches between ORCHESTRA I and II, and permits monitoring of previously selected voice.
- ② VARI: This adds variations of sound to both ORCHESTRA sections.
- ③ SUSTAIN: This adds a prolonged sound to the ORCHESTRA voice.
- 4 EFFECT: This allows the player to affect the ORCHESTRA sounds with "EFFECT SETTING" section. (See page 9 for details).
- 5 VOLUME: Allows loud/soft adjustment.

Ex. Select "BRASS II" for the UPPER keyboard

(1) Press the UPPER ORCHESTRA I (ORCHESTRA on the XR7000) tab in the KEYBOARD CONDUCTOR section to engage the orchestra section.





(2) Press the BRASS II tab in the ORCHESTRA I (ORCHESTRA on the XR7000) section of the UPPER/SOLO (UPPER on the XR7000) MANUAL control section. ORCHESTRA II section (XR9000 only).

Ex. Select the sound STRING I for the UPPER ORCHESTRA II keyboard.

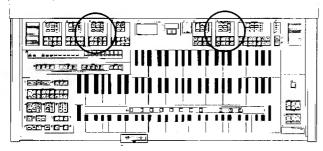
- (1) Press the UPPER ORCHESTRA II (Orchestra on XR7000) tab in the KEYBOARD CONDUCTOR section to turn on the tab lamp. The I/II tab in the ORCHESTRA section of the UPPER/SOLO MANUAL section will light up.
- (2) Press the STRING I tab.

Notes:

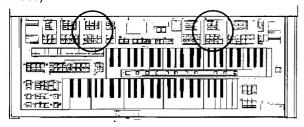
- To return to the ORCHESTRA I tone, press the I/II tab to turn off the tab lamp.
- If you turn the lamps of both the ORCHESTRA I and II switches, you can mix these two sounds.

3 PRESET INSTRUMENT

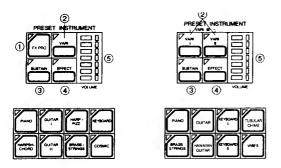
(XR9000)



(XR7000)



The XR Series provides separate PRESET INSTRUMENT control sections for the LOWER and UPPER/SOLO (LOWER and UPPER on the XR7000) keyboard.



- 1 FX PRO (LOWER KEYBOARD only XR7000): Allows you to add any one of 128 sounds to the LOWER KEYBOARD.
- ② VARI: This adds three variations of sounds (this feature does not affect "FX Pro"). See page 75 for FX Pro Sounds.
- 3 SUSTAIN: This adds extra resonance (prolongs sound).
- 4 EFFECT: This affects the PRESET INSTRUMENT output in the "EFFECT SETTING" section. (See page 9 to 13 for details).
- (5) VOLUME: Allows volume adjustment.

Ex. Select GUITAR sound for the UPPER KEYBOARD

- (1) Press the PRESET INSTRUMENT tab in the UPPER KEY-BOARD CONDUCTOR section.
- (2) Press the GUITAR tab in the UPPER/SOLO (UPPER on the XR7000) MANUAL PRESET INSTRUMENT section.



When the VARI I button is pressed, the button lamp lights to indicate that variation 1 is selected.

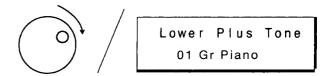


If you press the VARI II button instead, then lamp lights and variation 2 is selected.



To select variation 3, turn on the both VARI I and VARI II button lamps.

Ex. Select 01 GR. PIANO sound for the LOWER KEYBOARD using the FX PRO feature.

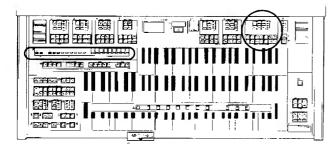


- (1) Press the FX PRO tab in the PRESET INSTRUMENT section.
- (2) The display will show the currently selected FX PRO tone number and tone name for a short time. Turn the Dial while the display is showing the FX PRO menu to select any one of 128 sounds to be added to the PRESET INSTRUMENT sound of the LOWER KEYBOARD.
- (3) To play an FX PRO sound only, press the PRESET INSTRUMENT tab (or any tab that is on) in the KEYBOARD CONDUCTOR section to turn off the tab lamp.
- (4) Press the FX PRO tab once again to turn off the FX PRO sound.

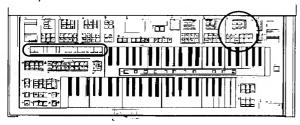
Note: When the FX PRO tab is lit, the SUSTAIN, EFFECT, and VOLUME controls can be used to adjust the FX PRO sounds.

4 SYNTHESIZER

(XR9000)



(XR7000)

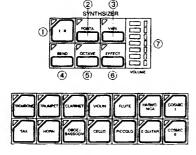


In addition to the solo keyboard, the XR9000 also provides two synthesizers for PEDAL and UPPER (1 for XR7000 UPPER) keyboards. The XR7000 provides one synthesizer for UPPER and LOWER keyboards.

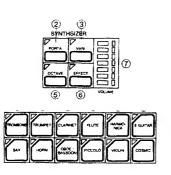
- 1) I/II(XR9000 only): The switch between SYNTHESIZER I and II.
- 2 PORTA: This provides a continuous glide between notes for legato playing (see p. 13)
- (3) VARI: This adds variations of sounds.
- (4) BENDER (XR9000 only): (see p. 13)
- (5) OCTAVE (see p. 12)
- (6) EFFECT: This adds effects to the output you setting with "EFFECT SETTING" section. (See page 9 to 13 for details).
- (7) VOLUME: Allows loud/soft adjustment.

Take the similar steps as selecting the ORCHESTRA tones (see page 4) to select a sound.

(XR9000)



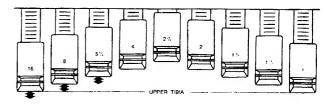
(XR7000)



5-1 TIBIA DRAWBARS

TIBIA sounds can be selected for LOWER, UPPER, and PEDAL keyboards.

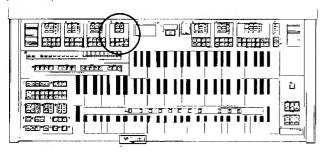
(1) Press the appropriate TIBIA tab in the KEYBOARD CONDUCTOR section.



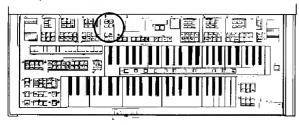
(2) Use the UPPER and LOWER drawbars to adjust the balance between the output from the two sets of TIBIA. The numbers on the drawbars shows the pitch comparable to the length of pipes on a pipe organ. Pulling the drawbar toward you to increases the volume, pushing it away from you decreases the volume.

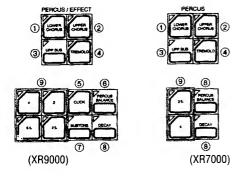
5-2 PERCUSSION/EFFECT

(XR9000)



(XR7000)





PERCUS (accent) (UPPER TIBIA only) and EFFECTS can be added to the UPPER and LOWER TIBIA sound.

Note: These effect buttons are toggles. Pressing the button once turns on the effect; pressing it a second time turns it off.

Effect Buttons

- 1 LOWER CHORUS This adds a slow swelling or undulating to the LOWER keyboard TIBIA.
- 2 UPPER CHORUS This adds a slow swelling or undulating effect to the UPPER keyboard TIBIA.
- ③ UPP.SUS This adds a lingering effect to tones selected on the UPPER keyboard TIBIAS
- 4 TREMOLO This switches the UPPER and LOWER keyboard CHORUS effects, if present, to TREMOLO. The sound swells and provides a rotating speaker effect.

Note: It is impossible to use CHORUS and TREMOLO simultaneously.

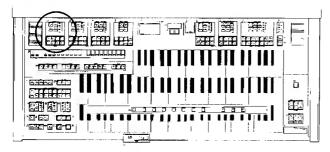
- (5) CLICK (XR9000 only) This adds clicks to the UPPER keyboard TIBIA output. When the click is added to the TIBIA sound, it creates a desired jazz effect.
- 6 PERCUS BALANCE This adjusts the volume of the UPPER keyboard PERCUS.
- SUBTONE (XR9000 only) This adds a desirable effect equivalent to a commercial organ and external speaker combination.
- 8 DECAY This adjusts the time that it takes the UPPER keyboard percussion effect to die out.
- (9) PERCUS This adds accent to the sound.

Ex. Adding PERCUS to the UPPER keyboard.

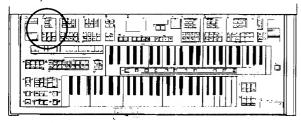
(1) By press a PERCUS tab, the corresponding pitch of accent will be added.

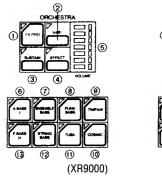
6 PEDAL ORCHESTRA

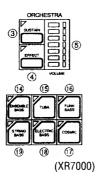
(XR9000)



(XR7000)







ORCHESTRA sound can be selected for the PEDAL keyboard (XR9000 only). FX PRO allows you to add any one of 128 sounds to the PEDAL ORCHESTRA (see page 75).

- 1 FX PRO (XR9000 only): allows the addition of any one of 128 sounds to the PEDAL ORCHESTRA SECTION.
- (2) VARI (XR9000 only): This adds a variation of sounds in addition to the original voice (this feature not available for FX PRO).
- (3) SUSTAIN: This adds a lingering effect to the sound.
- 4 EFFECT: This adds effects to the output you setting with "EFFECT SETTING" section. (See page 9 to 13 for details).
- (5) VOLUME: Allows loud and soft volume adjustment.

Ex. Select TUBA sound for the PEDAL KEYBOARD.

- (1) Press the PEDAL ORCHESTRA tab in the KEYBOARD CONDUCTOR section.
- (2) Press the TUBA tab in the PEDAL ORCHESTRA section.

Note: De sure FX PRO is turned off (lamp off) before selecting TUBA.

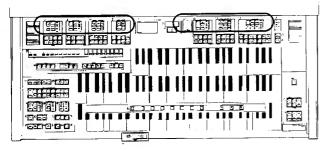
Ex. Adding the CHURCH ORGAN #020 sound to the PEDAL keyboard.

- (1) Press the FX PRO tab in the PEDAL ORCHESTRA section to turn on the tab lamp. Display 7 will show the currently selected FX PRO tone number and name for a short time.
- (2) Turn the Dial while the Display is showing the FX PRO menu to select CHURCH ORGAN #020 which will be added to the PEDAL ORCHESTRA sound.
- (3) To play only FX PRO sound, press the PEDAL ORCHESTRA tab in the KEYBOARD CONDUCTOR section to turn off the tab lamp.
- (4) Press the FX PRO tab once again to turn off the FX PRO sound.

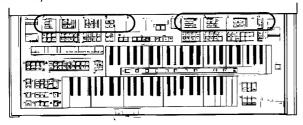
Note: When the FX PRO tab is lit, the SUSTAIN, EFFECT, and VOLUME switches can be used to adjust the FX PRO sounds.

7 EFFECT

(XR9000)



(XR7000)



7-1 ADDING EFFECT

Each tone block and Accompaniment I/II sections have effects buttons. Pressing an effect button turns the button lamp on and activates an effect for the section. Press the button again to turn off the lamp light and to deactivate the effect. Use the effect buttons, CURSOR tabs, and the Dial to set the value for the each effect. Not all the effects are available for every sections. See the chart in the page 30 for the effects and the value available for each section. Use the CURSOR tabs to select the appropriate mode. See page 77.



Use the right cursor tab to move to the next menu.



Use the left cursor to move to the preceding menu.

Use the Dial to change the value of the parameter.

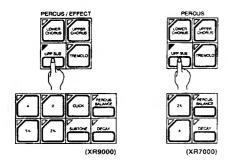


Turn the Dial clockwise to increase the value.



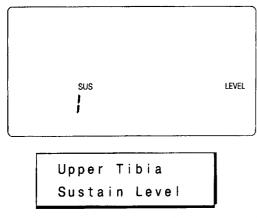
Turn the Dial counter-clockwise to decrease the value.

7-2 SUSTAIN/KNEE LEVER

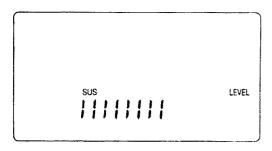


SUSTAIN prolongs the sound.

(1) Press the SUSTAIN or UPP. SUS tab in the appropriate section. The tab lamp lights, the display will change as follows for a short time.



(2) Turn the Dial while the display is showing the SUSTAIN LEVEL menu to select any one of the 15 settings. The more the number of the bars are in the display, the longer sustain time.



KNEE LEVER

If you turn on the KNEE LEVER setting of a section, the SUSTAIN effect is applied to the section by pressing the KNEE LEVER to the right when the SUSTAIN tab lamp is off.

Ex. Setting KNEE LEVER function to the UPPER TIBIA/PERCUS section.

Upper Tibia Knee Lever ON

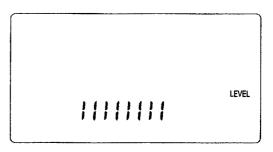
- (1) Press the SUSTAIN or UPP. SUS switch in the appropriate section. The "SUSTAIN Level" will appear in the lower side of Display 7. Then, press the right CURSOR switch until the KNEE LEVER menu will appear.
- (2) Use the Dial while the Display is showing the KNEE LEVER menu to select ON or OFF.

Upper Tibia Knee Lever OFF

7-3 PERCUS BALANCE

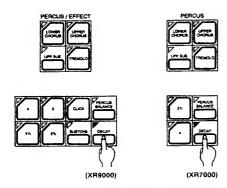
This controls the volume of UPPER TIBIA PERCUS.

(1) Press the PERCUS BALANCE tab in the TIBIA PERCUS/EFFECT section. The tab lamp lights and the display shows Percus Balance menu for a short time.

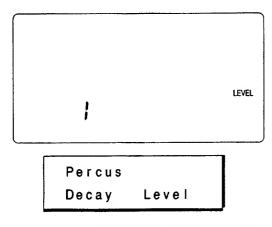


(2) Turn the Dial and select a value (1–15) while the display is showing the PERCUS BALANCE menu.

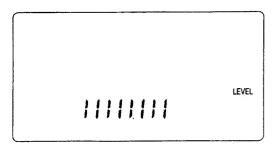
7-4 DECAY LEVEL



This controls the decay speed of UPPER TIBIA PERCUS. (1) Press the DECAY button in the TIBIA PERCUS/EFFECT section. The button lamp lights and the display shows "Decay Level" for a short time.

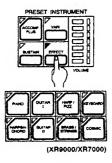


(2) Turn the Dial while the display is showing the DECAY LEVEL menu to select a value.

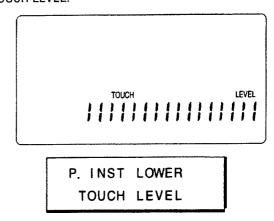


7-5 TOUCH LEVEL

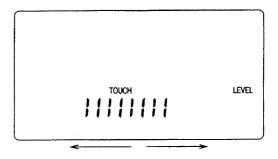
Your organ features Touch Response, which allows you to control the volume of each note by playing hard or soft. The TOUCH LEVEL controls the touch settings of the keyboards for each tone blocks. (1) Press the EFFECT tab in the appropriate section. In this example, let's press the EFFECT tab in the LOWER PRESET INSTRUMENT section. The button lamp lights and the display shows EFFECT SETTING menu for a short time.



(2) Press the right CURSOR tab several times until the display shows TOUCH LEVEL.



(3) Turn the Dial while the display is showing the TOUCH LEVEL menu to select a value (1–15). The more bars showing the wider dynamic range, providing greater contrast between loud and soft playing.



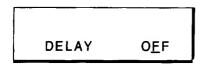
Note: The PEDAL keyboard of the XR7000 does not feature Touch Response. However, you can set TOUCH LEVEL for volume control via MIDI message.

7-6 DELAY/FLANGER

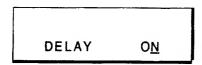
Delay adds a slightly delayed (echoed) sound to the direct sound. Flanger adds a slightly detuned sound to the direct sound. You can set either of the Delay or Flanger setting in this mode. Select Delay or Flanger in the EFFECT EDIT mode (see page 46).

Notes:

- DELAY and FLANGER cannot be turned on simultaneously.
- If you turn the ENSEMBLE/CELESTE setting to on, the Delay/Flanger will be automatically deactivated.
- (1) Press the EFFECT button in the appropriate section. The button lamp lights and the display shows EFFECT SETTING menu for a short time.
- (2) Press the right CURSOR tab several times until the display shows DELAY or FLANGER. (You can select DECAY or FLANGER with EFFECT EDIT MODE)



(3) Turn the Dial and select ON or OFF.



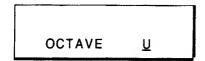
7-7 OCTAVE SHIFT (UP/DOWN)

This changes pitch by 1 octave higher or lower (total 3 pitches or 16', 8', 4').

- (1) Press the EFFECT button in the appropriate section. The button lamp lights and the display shows EFFECT SETTING menu for a short time.
- (2) Press the right CURSOR tab several times until the display shows OCTAVE.



(3) Turn the Dial and select a value "U (Up)", "- (normal)", or "D (Down)".



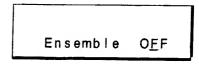
7-8 ENSEMBLE/CELESTE

This adds a rich and wide effect to the sound. Select Ensemble or Celeste in the EFFECT EDIT mode (see page 46).

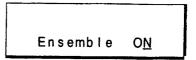
Notes:

- ENSEMBLE and CELESTE CANNOT BE TURNED ON SIMULTANEOUSLY.
- If you turn the setting Delay/Flanger to on, the ENSEMBLE/CELESTE will be automatically deactivated.

- (1) Press the EFFECT button in the appropriate section. The button lamp lights and the display shows EFFECT SETTING menu for a short time.
- (2) Press the right CURSOR tab several times until the display shows ENSEMBLE or CELESTE.



(3) Turn the Dial and select a value "ON" or "OFF".



7-9 BENDER

Pressing down on the keys for SYNTHESIZER section after they've initially been struck adds a pitch bend effect to the sound up to a half-tone. The BENDER adjusts whether the pitch will bend up or down.

Example: Using the BEND button (XR9000 only)

- (1) Press the BEND button in the SYNTHESIZER section. The button lamp lights and display shows EFFECT SETTING menu for a short time.
- (2) Turn the Dial and select a value "U (Up)", "- (normal)", or "D (Down)".

SYNTH. BENDER <u>D</u>

Example: Using the EFFECT button

(1) Press the EFFECT button in the SYNTHESIZER section. The button lamp lights and Display 7 shows the EFFECT SETTING menu for a short time.

SYNTH. BENDER <u>U</u>

- (2) Press the right CURSOR tab several times until display shows SYNTH BENDER.
- (3) Turn the Dial and select a value "U (Up)", "- (normal)", or "D (Down)".

Note: With the XR9000, you cannot set the BENDER setting when the BEND button lamp is not lit. On the XR7000 PITCH BEND may be selected only when the EFFECT button is on.

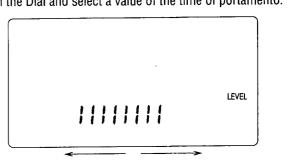
SYNTH. BENDER <u>D</u>

7-10 PORTAMENTO SPEED

Portamento provides a continuous glide between notes for legato playing of the SYNTHESIZER section. Portamento time adjusts the Portamento speed.

Example: Using the PORTA button

- (1) Press the PORTA button in the SYNTHESIZER section. The button lamp lights and the display shows "SYNTH Porta. Time".
- (2) Turn the Dial and select a value of the time of portamento.



Example: Using the EFFECT button

- (1) Press the EFFECT button in the SYNTHESIZER section. The button lamp lights and the display shows EFFECT SETTING menu for a short time.
- (2) Press the right CURSOR tab several times while the display is showing the EFFECT SETTING menu until the display shows.

8 EFFECT FOR ACCOMPANIMENT

This mode allows you to set effects for each part of the auto accompaniment (see page 17).

(1) Press the EFFECT button in the ACCOMPANIMENT CONTROL section. The button lamp lights up.



(2) Turn the Dial to select a part to which the EFFECT will be applied. Select "ACC-I CHORD" for Accompaniment I Chord part.

ACC. SELECT ACC-I CHORD

Select "ACC-I MELODY" for Accompaniment I Melody part.

ACC. SELECT ACC-I MELODY

Select "ACC-II CHORD" for Accompaniment II Chord part.

ACC. SELECT ACC-II CHORD

ACC, SELECT
ACC-II MELODY

Select "ACC-II MELODY" for Accompaniment II Melody part.

- (3) Press the right CURSOR switch several times to select the EFFECT type which will be applied to.
- (4) Turn the Dial and select a value of the EFFECT.

Note: You can set the SUSTAIN and KNEE LEVER settings with the similar procedure as above. Replace step #1 by pressing the SUSTAIN button.

9 MULTIPHONIC

Pressing the MULTIPHONIC button adds surround sound type effect. Pressing the MULTIPHONIC button a second time cancels the effect.



10 REVERB

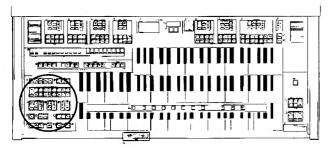
Pressing the REVERB button adds reverberation (echo effect). Pressing the REVERB button a second time cancels the effect.



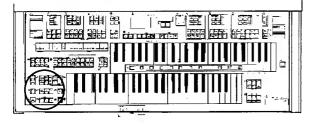
Note: You can select the type and depth of the Reverb with the EFFECT EDIT mode (see page 47).

11 RHYTHM SECTION

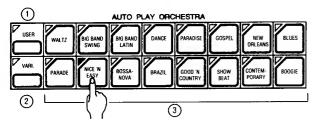
(XR9000)



(XR7000)



The rhythm section of your XR Series organ provides orchestra styled automatic rhythm accompaniment with a choice of 32 independent prerecorded patterns and 16 users (programmable ones).



11-1 SELECTING A RHYTHM PATTERN

- 1) USER button allows you to select any one of the 16 programmable patterns (either factory or those of your own creation).
- (2) VARI (Variation) switch allows you to select a completely independent variation pattern for each of the 16 preset patterns.
- (3) 18 RHYTHM SELECT buttons allow you to select a rhythm style from 16 patterns each of preset, variation, or user.

Note: See page 70 for complete listing of RHYTHMS.

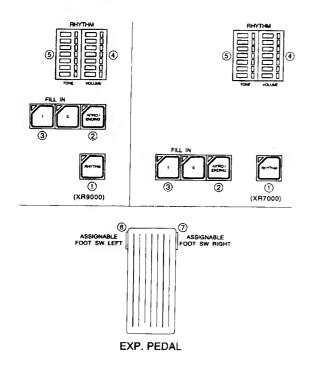
Ex. Selecting the GOSPEL rhythm.

(1) Press the GOSPEL #6 tab. The tab lamp lights.

Notes

- To select a variation pattern, press the VARI button and the button lamp lights. To return to the normal pattern, press the VARI button again to turn off the button lamp.
- To select a USER (programmable) pattern, press the USER button and the button lamp lights. To return to the normal pattern, press the USER button again to turn off the button lamp.
- See the "EDIT MODE" in the Chapter 2 for programming USER patterns.*
- * Features include tempo control, special variations (intros, endings, and fill ins), hand percussion and advanced editing facilities which allows the player to alter the standard patterns to fit individual needs.

11-2 RHYTHM CONTROL



- 1 RHYTHM button: Activates the rhythm.
- ② INTRO/ENDING button: provides an introduction or wrap-up ending.
- (3) FILL IN I/II buttons: produces two independent variations of rhythm fill-ins.
- (4) RHYTHM VOLUME buttons: control the rhythm percussion loud and soft levels.
- (5) RHYTHM TONE switches: The upper end of the RHYTHM TONE control emphasizes the percussion sounds of higher pitch; while the lower end emphasizes the percussion sounds of lower pitch (much like a graphic equalizer).
- 6 Assignable LEFT FOOT SWITCH allows assignment of Stop, Glide, Synth Plus, Percussion, Registration Bank, Registration Up INTRO/ENDING and FILL IN.
- Assignable RIGHT FOOT SWITCH allows assignment of Stop, Glide, Synth Plus, Percussion, Registration Bank, Registration Up INTRO/ENDING and FILL IN.

a. How to start rhythm MAIN pattern.

- (1) Press the RHYTHM tab (1) to turn on the tab lamp.
- (2) Play a note on the LOWER or PEDAL keyboards to start the rhythm accompaniment.

How to stop rhythm MAIN pattern.

(1) Press the RHYTHM tab. The RHYTHM tab lamp turns off and the rhythm accompaniment will stop. You can also stop the rhythm using the LEFT ⁶/RIGHT ⁷ FOOT SWITCH (see page 61 for details). Left/Right bars may be used for this function, but not if 1 finger chord is activated.

b. FILL INS, INTRO, and ENDING

The three tabs in this section offer the player four prerecorded variations on the MAIN rhythm pattern — a pattern which normally just repeats. The first two, INTRO and ENDING, provide an introduction and wrap-up ending respectively. The other two produce variations of rhythm fill-ins for use during the performance.

Examples:

(1) Make sure that the rhythm accompaniment is on standby – that is, the RHYTHM tab lamp lit is on. If the lamp is off, fill-ins are not available. (2) Press the FILL IN I (or FILL IN II) tab.

Note: You may also do this while the rhythm accompaniment is on.

- (3) Activate the rhythm accompaniment and play. When you need a fill-in, press the right foot switch (Left/Right foot switches or Left/Right bars can also be used for this function only when one finger chord button is deactivated). The rhythm pattern first switches to the Fill-in pattern and then back to the MAIN pattern when the fill-in is over.
- (4) Alternatively, if the rhythm accompaniment is on standby, press the right foot switch to play the fill-in followed by the MAIN pattern.

Example: INTRO and ENDING

- (1) Make sure that the rhythm accompaniment is on standby that is, the RHYTHM tab lamp is on. If the lamp is off, intros are not available.
- (2) Press the INTRO/ENDING tab. Press a key or chord on the lower manual or a pedal key required for the first chord of the song. After an introduction, the MAIN rhythm accompaniment starts. The INTRO/ENDING tab lamp lights during the introduction and then goes out.
- (3) Press the INTRO/ENDING tab.
- (4) When you near the point where you want the ending, press the right foot switch. After the ending, the rhythm accompaniment stops. The LED in the INTRO/ENDING tab lights during the ending and then goes out.

11-3 TEMPO CONTROL

The upper left hand corner of the Display gives the tempo. Turning the TEMPO/DATA INCREMENT Dial to the right (clockwise) increases tempo.



Or, press the right CURSOR button to increase the tempo.



Turning the Dial to the left (counter-clockwise) decreases the tempo.



You can also decrease the tempo by pressing the left CURSOR switch.



Note: The organ's range is 50 - 300 beats per minute.

a. TAP TEMPO

The TAP TEMPO button provides an alternate, more direct method for changing the tempo.



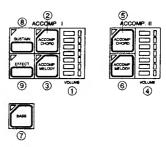
Example:

(1) Press the TAP TEMPO button three times at the desired tempo. The organ will measure the intervals and automatically change the value on the display. Note: Tapping the switch while the rhythm accompaniment is on — changes the tempo from the next bar. This facility makes it much easier to change tempos during a performance.

When the tempo is quicker than 300 BPM, it is set to 300 BPM.

11-4 AUTO PLAY ORCHESTRA (A.P.O.)

This section offers automatic bass accompaniment as well as automatic orchestral accompaniment.



Tone/Effect Blocks

ACCOMP I section: These switches control the tone and volume for ACCOMP I.

- 1 VOLUME switches control the overall volume of the ACCOMP I section.
- Pressing the ACCOMP. CHORD button in the ACCOMP. I section adds the "CHORD" Part to the ACCOMP I section of autoaccompaniment.
- ③ Pressing the ACCOMP. MELODY button in the ACCOMP. I section adds the "MELODY" Part to the ACCOMP. I section of auto-accompaniment.

ACCOMP II section: These buttons control the tone and volume for ACCOMP II.

- 4 VOLUME switches control the overall volume of the ACCOMP I section
- (5) Pressing the ACCOMP. CHORD tab in the ACCOMP. II section adds the "CHORD"
 - Part to the ACCOMP II section of auto-accompaniment.
- Pressing the ACCOMP. MELODY tab in the ACCOMP. II section activates the "MELODY" Part to the ACCOMP II section of autoaccompaniment.
- (7) BASS: This tab adds bass part.
- 8 SUSTAIN: This button adds sustain effect to each auto-accompaniment section.
- (9) EFFECT: This button adds effect to each auto-accompaniment section.

Example: Playing the rhythm, bass, Accomp Chord 1, and Accomp Melody I parts.

(1) Select a rhythm using the AUTO PLAY ORCHESTRA buttons. Then, activate the RHYTHM button.



(2) Select the parts.

Pressing the ACCOMP. CHORD tab in the ACCOMP. I section activate the "CHORD" Part of the ACCOMP I section.

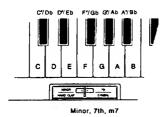
- (3) Press the ACCOMP. MELODY tab in the ACCOMP. I section to activate the "MELODY" Part of the ACCOMP I section.
- (3) Press the BASS button to activate the "BASS" Part.
- (4) Play a chord on the LOWER keyboard. You will hear the bass, Accomp Chord 1, and Accomp Melody I parts.



11-5 ONE FINGER PLAY

This function allows you to play a complete major chord with only one finger and others with two fingers: one on the bass (root) note of the chord and the other on TOUCH BARs.

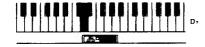
- (1) Press the ONE FINGER button to turn on the button lamp.
- (2) Press a root note in the LOWER KEYBOARD to play the major chord.



Press a root note and the left TOUCH BAR to play the minor chord.



Press a root note and the right TOUCH BAR to play the seventh chord.

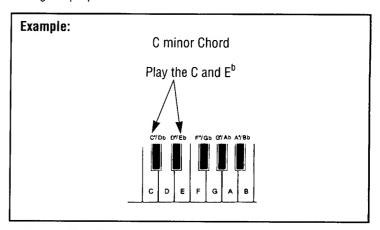


Press a root note and the two TOUCH BARs simultaneously to play the minor seventh chord.



a. Advanced Chording

To select, turn off the ONE FINGER button. With the Rhythm Accompaniment on, various advanced chords may be formed by adding the proper note or notes.



11-6 MEMORY

This holds the current chord pattern even after you remove your hand from the LOWER keyboard.

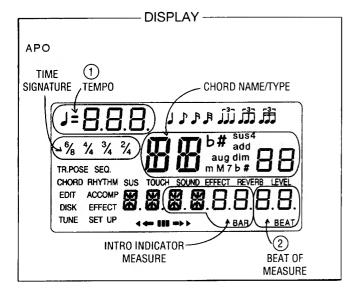
Let's select a chord for the introduction using the MEMORY function.

- (1) Select the part you want to play.
- (2) Press the MEMORY button to turn on the button lamp.
- (3) Press the INTRO/ENDING tab to start the introduction.
- (4) Play a chord on the lower keyboard to assign a chord to the introduction.

11-7 DISPLAY

Display shows a wide variety of information during auto-accompaniment.

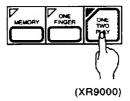




- (1) Tempo: The upper left hand corner of the Display gives the tempo.
- (2) Bar and Beat: The lower right hand corner of display gives numbers of bar and beat if the rhythm accompaniment is on. Minus sign (–) appears as a count down during the introduction.

11-8 ONE TWO PLAY

The ONE TWO PLAY function automatically selects an appropriate registration for the current rhythm (A.P.O.) pattern.



Example:

(1) Press the ONE TWO PLAY tab to automatically select the panel settings appropriate for the current A.P.O. (Auto Play Orchestra) style. Note: This function automatically changes the drawbar settings as well, lighting the lamp in the DRAWBAR piston in the REGISTRATION MEMORY section. The Display will show the DRAWBAR settings. The "m" at the left top of the Display indicates that "Memorized" Drawbar Setting is selected.

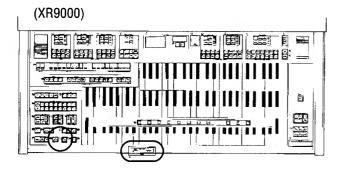
The "U", "L", and "P" shows the UPPER, LOWER, PEDAL keyboards' DRAWBAR settings respectively.

(2) Adjust the registration as necessary.

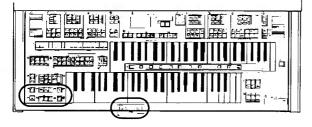
Notes:

- At this point, the drawbar settings are not adjustable. To change them, press the DRAWBAR piston (lamp goes out) to return them to the actual manual settings and adjust the drawbars.
- This function is not available for programmed rhythms.

12 OTHER FUNCTIONS



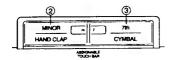
(XR7000)



12-1 HAND PERCUSSION

HAND PERCUS button: activates the HAND PERCUSSION. TOUCH BAR switches: allows you to select four types of DRUM





SETs when the HAND PERCUS tab lamp is lit. When the HAND PERCUS tab lamp is lit, you cannot play HAND PERCUSSION sounds with the TOUCH BARS (see page 67).

The XR Series organs provides not only prerecorded rhythm patterns, but also solo percussion instruments. They are accessible two ways: the LOWER keyboard and touch bars located on the key rail just below that keyboard. The volume of the output depends on the force of the keystroke.

Example: Touch bars

1. Press the left TOUCH BAR to play hand clap sound. Press the right TOUCH BAR to play cymbal crash sound.

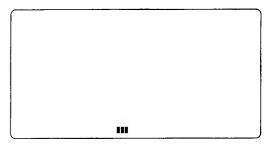
Notes:

- When the HAND PERCUS button lamp is lit, you cannot play HAND PERCUSSION sounds with the TOUCH BARS.
- This type of hand percussion cannot be used at the same time as the ONE FINGER chord function (see page 18.)
- See page 61 to change the touch bar assignment to percussion instruments other than the hand clap and cymbals. Foot switches and bar assignment may vary with ONE TWO PLAY settings.
- You can assign various types of functions to the TOUCH BARS.
 See page 61 for details.

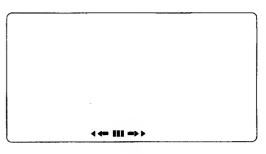
Example: LOWER keyboard

- (1) Press the HAND PERCUS button so that the lamp lights.
- (2) You can select four types of DRUM SETS Note: See pages 67 and 68 UPA for the drum sounds assignments.

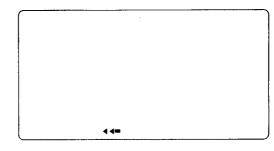
Pressing two TOUCH BARS simultaneously switches between the USER DRUM SET and the DRUM SET 1.



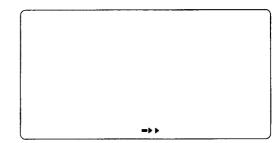
When the center bar mark on the bottom of the Display is lit, the DRUM SET 1 is selected. When the center bar mark, right arrow, and left arrows on the bottom of Display 1 are lited, the USER DRUM SET is selected.



If you press the left TOUCH BAR when the DRUM SET 1 is selected, a left arrow mark will light on the bottom of the Display indicating that DRUM SET 2 is selected.



If you press the right TOUCH BAR when the DRUM SET 1 is selected, a left arrow mark will light and DRUM SET 3 will be selected.



Note: See page 67 UPA for assigning drum sounds for USER DRUM SET.

- (3) Press the keys for the desired percussion instruments.
- (4) Press the HAND PERCUS button again to turn off the HAND PERCUSSION.

12-2 FOOT SWITCHES

Note: You can assign various types of functions to the FOOT switches. See page 61 for details.

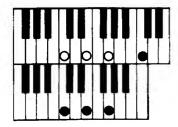
Pressing the left FOOT SWITCH stops the automatic accompaniment. You can assign other functions with the SET UP mode (see page 61). (ONE TWO PLAY functions may vary.)



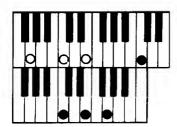
12-3 AUTO MELODY CHORD



(1) AUTO MELODY CHORD I button: turns AUTO MELODY CHORD I part on or off.



(2) AUTO MELODY CHORD II button: turns AUTO MELODY CHORD II part on or off.



This section offers 2 types of automatic harmony to the UPPER keyboard melody line according to the chord you are playing in the LOWER keyboard. Pressing the right FOOT SWITCH activates the fill-in or ending. You can assign other functions with the SET UP mode (see page 61).



12-4 KNEE LEVER

Pressing the KNEE LEVER to the right activates the sustain effect when the SUSTAIN button lamp is not lit.

- (1) Select the tone or accompaniment section which contains the sustain function.
- (2) While pressing the KNEE LEVER, play the section you selected with step 1 above. Sustain effect will be added to the section.

13 REGISTRATION MEMORY

The registration memory section, which is located between the UPPER and LOWER keyboards, allows you to store up to 14 of your registration combinations for instant recall (see page 79 for listing of Factory Presets).

- 1 Numbered piston These indicate the memory areas available.
- (2) BANK piston switches between the A bank and B bank of the registration.
- WRITE piston copies the current combination to your choice of memory area.
- 4 RHYTHM FIX piston Activating this switch tells the organ to leave the RHYTHM and AUTOMATIC accompaniment at the current settings so that pressing a numbered piston changes only the tone settings.
- 5 DRAWBAR piston copies the drawbar settings from the registration section to the organ. This piston is automatically activated when one of the numbered piston is pressed.

Note: The following types of data cannot be stored on the REGISTRATION section.

- TOTAL VOLUME, ONE TWO PLAY, TAP TEMPO, INTRO/ENDING tabs
- USER (A.P.O.)rhythms, ORGAN TUNING, DISK PLAYER SYSTEM settings, edit buttons, set-up buttons.

Storing a Registration

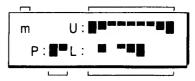
Example:

- (1) Set the registration to be stored.
- (2) Select the bank. When the BANK piston light is off, the bank A is selected. If you press the BANK piston to turn on the piston lamp, bank B is selected.
- (3) While pressing and holding the WRITE piston, press the numbered piston to be used for storage. The registration will be stored.

13-1 RECALLING A REGISTRATION

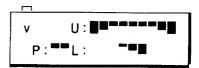
Example:

(1) Press the appropriate number piston so that it lights. The registration will be recalled and the DRAWBAR switch lamp will light. The Display shows the DRAWBAR settings. The "m" at the left top of the Display indicates that "Memorized" Drawbar Setting is selected.



The "U", "L", and "P" shows the UPPER, LOWER, PEDAL keyboards' DRAWBAR settings respectively.

To change the loaded drawbar settings, press the DRAWBAR switch so that the lamp goes off, and adjust the drawbars.

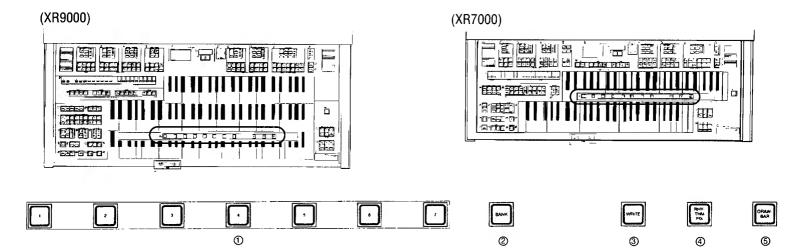


(2) Adjust the registration as necessary.

Notes

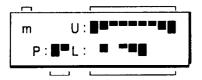
• At this point, the drawbar settings are not adjustable. The only way to change them is to press the DRAWBAR piston (lamp goes out) to return them to the actual manual settings to adjust the drawbars.

13-2 RHYTHM FIX



Press the RHYTHM FIX piston to lock the RHYTHM and ACCOMPA-NIMENT section at the current settings so that subsequent recalls change only the tones. Press the RHYTHM FIX piston a second time to deactivate this function.

(3) Press the currently lighted numbered piston in the REGISTRA-TION section to leave the registration mode.



14 DISK PLAYER SYSTEM

DISK SEQUENCER

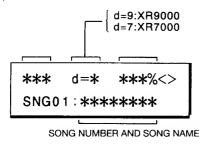
The disk sequencer is a function that records and replays songs. It also records and replays a registered program or programmed rhythm used in a song at the same time.

14-1 SELECTING A SONG

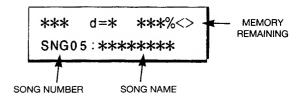


(1) Insert the supplied disk or a disk which contains a song recorded on this instrument. The display shows the following information: If other types of messages appear on the display, format the disk (see page 49).

The top left shows the type of the data (see the following page for details). The top center shows the type of the floppy disk. "d=9" for the XR9000 disk, "d=7" for the XR7000 disk.



The top right shows the amount of memory left in the floppy disk. The lower side of the display shows the song number and song name.



(2) Use the REW and FF buttons to select a song number to play. The FF switch increases the song number while the REW switch decreases it.

14-2 CONTENTS OF THE FLOPPY DISK

Up to ten songs can be stored on a floppy disk. Each song can be stored with all the 16 AUTO PLAY ORCHESTRA USER patterns, a set of REGISTRATION settings (7 programs each for the Banks A and B, and the panel settings) if you turn on the SYSTEM track in recording the song. Or, you can store or load AUTO PLAY ORCHESTRA USER (A.P.O.) patterns or REGISTRATION settings separately. The top left of the display shows the type of the contents of the floppy disk. "s" indicates song data. "r" indicates registration data. "a" indicates auto play orchestra data. The period mark "." will be displayed if there is nothing stored.

sra SNG01:

The above illustration indicates that song, registration, and the auto play orchestra data are stored on the song 1.

s.. SNG01:

The above illustration indicates that only the song data are stored on the song 1.

... SNG01:

The above illustration indicates no data are stored on the song 1.

14-3 REPLAY



(1) Select the song number to replay using the FF and REW switches (-, +).

The track button lamp on which the selected song is recorded lights.

(2) Press a track button whose lamp is lit if you do not want to replay that track. If you turned off a button lamp by mistake, press the button again to turn on the button lamp.

When the SYSTEM button is lit; the previously recorded settings (tone selection, tempo, etc.) are reproduced and the song is replayed.

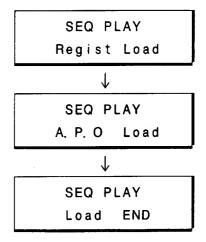
When the SYSTEM button is not lit, the song is replayed under the current settings.

Note: The SOLO track button of the XR7000 is for playing back the song you recorded with the XR9000.

(3) Press the PLAY button.

Note: When the SYSTEM button is lit, the song can be replayed after the following data is transferred from the disk.

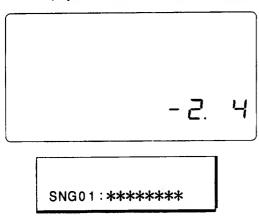
[Data transferred from the disk]



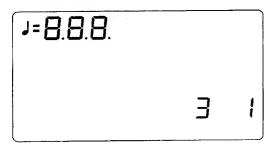
Contents of the program rhythm Contents of the program registration

While setting data is being transferred from the disk, the display will show "Regist Load", and then "A.P.O. Load" and "Load End".

The first two measures of the introduction are replayed, and replaying begins. The display will show the numbers of measure and beat.



During two measures of the introduction, minus sign "-" will be displayed to countdown to the beginning of the song.



(4) Press the STOP button to stop the song.

Notes:

- The tone and tempo settings can be changed during replay (except for the SUB TRACK).
- When the song is replayed all the way through, the PLAY button lamp automatically turns off, and Display returns to its original display.

14-4 PAUSE FUNCTION

Pressing the PLAY button during replay changes the lamp from continuously lit to flashing and replay is paused. Pressing the play button again lights the lamp continuously and the song is resumed from the point at which it was paused.

14-5 FF (FAST FORWARD) FUNCTION

Pressing the FF button during replay turns on the FF button lamp, and fast forwarding occurs while the button is held down. The song is replayed at high speed. When the button is released, the song returns to its original tempo.

14-6 REW (REWIND) FUNCTION

Pressing the REW button during replay turns on the REW button lamp and the song rewinds in measure units. No sound is heard during rewind. If the song is rewound all the way to the beginning, the song is paused.

14-7 RECORDING

Note:

- Turn the disk write protect off (close the window) during recording.
- (1) Insert the supplied disk or a formatted disk for your organ. Then, select the song number to be recorded using the FF and REW
- buttons.
 (2) Press the RECORD button. The lamps of tracks that have not been recorded start flashing. The track button lamp on which the



selected song is recorded lights.

(3) Select the track to be recorded.

Tracks that have not yet been recorded: Pressing the track button changes the lamp from flashing to off.

Tracks that have been recorded on: Pressing the track button



changes the lamp from lit to flashing to off to lit and the cycle repeats.

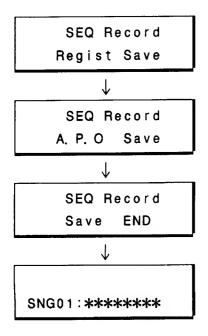
Set the track to be recorded so that its lamp starts flashing, TO RECORD – LAMPS MUST BE FLASHING.

Notes:

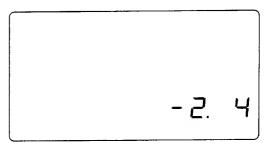
- Tracks whose lamps are lit or off cannot be recorded on. The lamp must be flashing.
- If a re-recording is carried out on a recorded track, the previous recording will be lost.
- Press the STOP button if you want to cancel recording.
- (4) Press the PLAY button and the button lamp lights.

Note: When the SYSTEM button is lit: the previously recorded settings (tone selection, tempo, etc.) are recalled before the recording starts.

When the SYSTEM button is not lit: the song is replayed under the current settings.



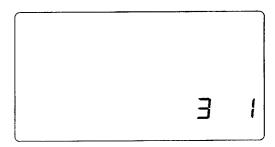
When the SYSTEM button is flashing, the song can be replayed after the contents of the program rhythm and registration data is trans-



ferred from the disk.

While setting data is transferred from the disk, the display will show "Regist Save" and "A.P.O. Save".

The first two measures of the introduction are counted down, and replaying begins.



Begin the performance. Display will show the numbers of measure and beat and you will hear the metronome sound if the rhythm is not on.

(5) Press the STOP button when the performance is completed.

Recording is stopped and the lamps in the RECORD and PLAY buttons turn off.

14-8 SUB TRACK

Recording Hand Percussion or FX PRO sounds.



You can record Hand Percussion or FX PRO sounds on the SUB track.

(1)Turn on either the HAND PERCUS or FX PRO.

Note: If you turn on the lamps of the both buttons, you can record only the Hand Percussion sound.

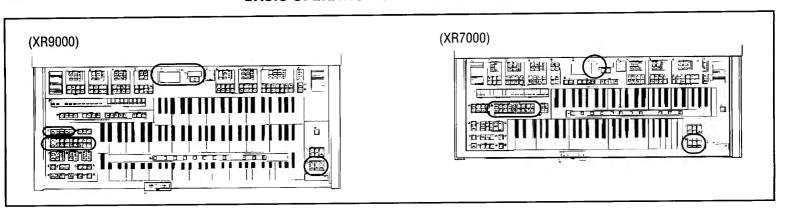
- (2) Select the song number to be recorded using the FF and REW (-, +) buttons.
- (3) Press the RECORD button to turn on the button lamp.
- (4) If the SUB TRACK button lamp is not flashing, press the SUB TRACK button until its lamp flashes.
- (5) Press the PLAY button to turn on its lamp.

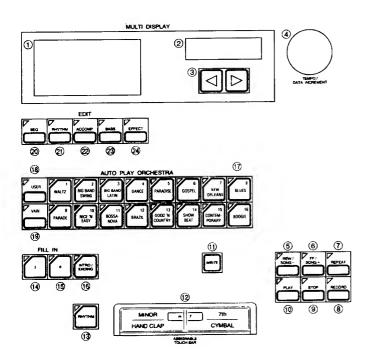
Note: If you are activating the SYSTEM track, FX PRO or HAND PERCUS button lamps may automatically go out. In that case, turn on the FX PRO or HAND PERCUS button.

(6) Press the STOP button when the recording is finished.

CHAPTER 2 EDIT MODE

BASIC OPERATION OF EDIT MODE PARTS





- (1) Color Display
- (2) Letter/Character Display
- (3) Cursor Up/Down
- (4) Tempo/Date Inc. Wheel

STEP EDIT

- (5) REW/SONG Deleted Data
 (6) FF/SONG + Insert Data
- (7) REPEAT Replace Data
- 8 RECORD Start/Stop in Step Edit Mode
- (9) STOP Cancel(10) PLAY Execute
- (1) WRITE Memorizing Edit
- (12) TOUCH BAR Assign/Change Hand Percussion Assign on Keyboard
- (13) RHYTHM Start/Stop Input Mode
- (14) FILL IN I Selecting I
 (15) FILL IN II Selecting II
- (16) INTRO/ENDING Selecting Intro/Ending

Selecting A.P.O. Pattern

- (17) A.P.O.
- (18) USER User of A.P.O.
- (19) VARI. Vari of A.P.O.

EDIT

- ② SEQ. Edit Data Made by Sequencer
- (21) RHYTHM Editing Rhythm of A.P.O. (22) ACCOMP. Editing ACC. of A.P.O.
- 22 ACCOMP. Editing ACC. of A.P.O.23 BASS Editing Bass of A.P.O.
- (24) EFFECT Editing Effecting Setting

AUTO PLAY ORCHESTRA (A.P.O.) EDIT CHART

Mode	Edit	Edit Value for Each Part		
		Rhythm	Accompaniment	Bass
RHYTHM SELECT	Part		Melody x2	MAJOR and MINOR (MAJOR and MINOR)
INPUT MODE	Real Time Input	Yes	Yes	Yes
	Delete	Yes	Yes	Yes
STEP EDIT	KEY ADJUST	No	On/Off	On/Off
	DELETE	Yes	Yes	Yes
	INSERT	Yes	Yes	Yes
	INSTRUMENT	128 sounds	128 sounds	128 sounds
	VOLUME	0 – 126	0 – 126	0 – 126
	SLOPE LEVEL	0 – 31	0 – 31	0 - 31
	PITCH BEND	-70 - 70	- 70 - 70	-70 - 70
	VELOCITY	2 – 126	2 – 126	2 – 126
	STEP TIME	0 – 47	0 – 47	0 – 47
	GATE TIME	_	2 – 1,000 *	2 – 1,000
	RETRIGGER	No	On/Off	On/Off
PATTERN LENGTH	Selecting Bar Number	1,2,4,8,16	1,2,4,8,16	1,2,4,8,16
BEAT CHANGE	Timing Select	6/8,4/4,3/4, No	No	No

Note: There may be some limitations to the values mentioned above. (1 beat corresponds to 100 values of GATE TIME.)

SEQUENCER

Mode	Edit	Value
PUNCH IN/OUT	ON/OFF	YES

EFFECT

Mode	Edit	Value
FLANGER/DELAY		FLANGER/DELAY
CELESTE/ENSEMBLE		CELESTE/ENSEMBLE
DELAY	FEED BACK	1 – 16
DELAT	TIME	1 – 16
	SPEED	1 – 16
FLANGER	FEED BACK	1 – 16
	DEPTH	1 – 16
REVERB	TYPE	PLATE/HALL/ROOM
NEVEND	LEVEL	1 – 16
TREMOLO	SPEED	1 – 16

1 ACCOMPANIMENT EDIT

1-1 Programming AUTO PLAY ORCHESTRA

The XR organ rhythm section provides 16 locations for storing edited versions of its standard, prerecorded rhythm patterns. You can create your patterns from scratch or you can alter a prerecorded rhythm pattern, its variation, or user rhythm. You can edit and store MAIN, FILL IN I, FILL IN II, INTRO, and ENDING for the new rhythm patterns.

Using Real Time, the XR Series records data as you play it. Step Time allows you to record one note at a time.

Writing (Storing your pattern)

You should write each part (see page 40 for the 8 parts such as RHYTHM, ACCOMP CHORD 1, etc.). If you try to edit BASS part without writing the RHYTHM part you have just edited, for example, the change you have made to the RHYTHM part will be canceled. (1) Edit an AUTO PLAY ORCHESTRA pattern (see pp. 32 – 48 for details).





- (2) When you have created a pattern, use the CURSOR tabs until either INPUT or STEP EDIT appears on the display.
- (3) Press the WRITE piston. The WRITE piston will light. While holding down the WRITE piston, press a numbered tab in the AUTO PLAY ORCHESTRA section.



The newly programmed rhythm pattern will be stored in the storage location of the USER rhythm. To play back the pattern, turn on the USER button and press the numbered tab in the AUTO PLAY ORCHESTRA section you selected for storing the pattern.

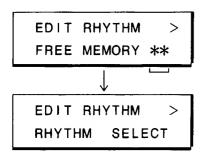
Note: You cannot perform the WRITE operation with the following setting.

- (a) If you forget to turn off the RHYTHM tab lamp (not the one in the EDIT section) after creating your pattern in INPUT mode, pressing the WRITE piston does not turn on the WRITE piston lamp. (Writing is impossible.)
- (b) If you've changed a parameter in STEP EDIT mode and have not pressed the PLAY switch to carry out the edit, pressing the WRITE piston does not turn on the WRITE piston lamp. (Writing is impossible.)
 If you want to cancel the change you made during the EDIT mode, press any button in the EDIT section without performing the WRITE operation.

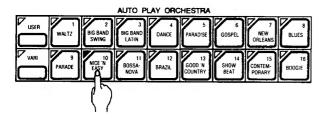
1-2 Programming RHYTHM Part

Basic Procedure

(1) Press the RHYTHM tab in the EDIT section. The tab lamp lights. The display will show MAIN indicating that you are in the mode to edit Main pattern.

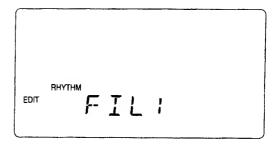


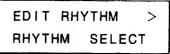
The display shows the percentage of memory left in the internal memory of your organ and then shows "RHYTHM SELECT".



(2) Select the rhythm using the AUTO PLAY ORCHESTRA tabs. If you want to remake USER rhythm pattern you created, press the USER button. If you want to create a new pattern from scratch, do not select any rhythm.

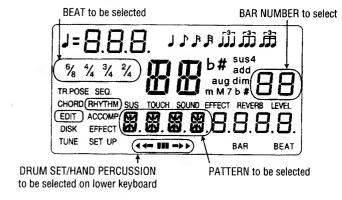






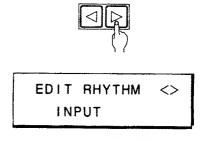
- (3) Select the rhythm pattern that will serve as the standard point using the FILL-IN and INTRO/ENDING tabs. The display will show the currently selected pattern in abbreviation (see the chart below). If you want to edit the Main pattern, you do not have to press any button in this step.
 - (a) Press the FILL IN I tab to edit FILL IN I (FIL 1) pattern.
- (b) Press the FILL IN II tab to edit FILL IN II (FIL 2) pattern.
- (c) Press the INTRO/ENDING tab once to edit INTRO (INTO) pattern.
- (d) Press the INTRO/ENDING tab twice to edit ENDING (ENDG) pattern.
- (e) Press the INTRO/ENDING tab once again to edit MAIN (MAIN) pattern.

Display in the EDIT MODE



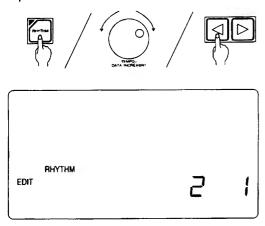
In editing the AUTO PLAY ORCHESTRA, various types of messages are displayed on the display including: Time Signature of the pattern and number of the measure.

Adding Notes in Real Time



(4) Press the right CURSOR tab and the display will show "INPUT". Now you are in RHYTHM INPUT mode.

(5) Press the RHYTHM tab (not the one in the EDIT section) to turn on the tab lamp.



The first two measures of the introduction are played, after which you can start inputting using the LOWER KEYBOARD.

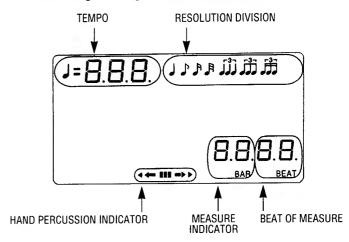


Note: You can select any one of the four types of hand percussion (Drum sets) assignments by pressing a TOUCH BAR. See page 20 for details.

Adjust the tempo using the Tempo Data Increment Dial. If the RHYTHM tab lamp is off in the INPUT mode, you can delete the entire RHYTHM pattern by press the FF and REW switches simultaneously.

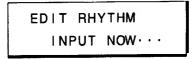


1-3 Correcting Timing Errors During Input



The XR Series provides facilities for automatically adjusting note positions so that they line up at regular intervals within the measure. Use the CURSOR buttons to specify the timing intervals. When no note mark is lighting, this function does not take effect. For example, if you select 8th note, all notes you will input will be moved to the nearest 8th note beat resolution.

(6) Use the LOWER keyboard to record the rhythm part.



Note: You can change the number of the rhythm part measures before entering the RHYTHM EDIT mode using the procedure mentioned in the page 37.

New notes for a particular instrument already in the pattern do not replace existing ones. Rather, they are added in.

Deleting Notes

- (7) To eliminate notes for a particular instrument from the pattern, hold down the REW button and press the corresponding instrument key for the instrument that you wish to delete, or press and hold down the FF button. Data on the RHYTHM pattern will be removed as long as the FF button is held down.
- (8) Press the RHYTHM tab (not the one in the EDIT section) when inputting is completed. The tab lamp will go off.

Note: If you want to cancel the pattern you created, press any button in the EDIT section without performing the WRITE operation. Press the RHYTHM button in the EDIT section to return to play mode. Or, press any other button in the EDIT section if you want to edit another part of the auto-accompaniment without storing your rhythm pattern.

2 Step Time Edit

Step Edit allows you to insert, delete and replace note by note.

- (1) Repeat the steps 1 to 3 of the basic procedure. (See page 33)
- (2) Press the right CURSOR button several times until the display showS "STEP EDIT". Now you are in STEP EDIT mode.



(3) Press the RECORD button. The RECORD button lamp lights and the display shows information on the beginning data of the rhythm part.



VOL:*** S:L31 ST:00

Note: You cannot delete this data.

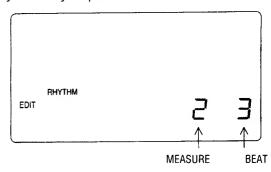
VOL(short for Volume) field shows the Volume level of the notes located after this data.

S:L (short for Slope Level) field shows how fast the volume level of the notes located after this data change. The value range is from 0 to 31.

ST (short for Step Time) field shows you where you're at within each beat. When the Time Signature is 6/8, the rhythmic beat divisions are represented as a fraction of 24. When the Time Signature is other than 6/8, the rhythmic beat divisions are represented as a fraction of 48. 24 equals to 8th note, for example.

2-1 Deleting Data

(4) Use the Dial to select the data to delete. As you rotate the Dial, data names appear on the display. Showing the beat and measure number of the data. Note events sound briefly in passing to help you audibly monitor your position.

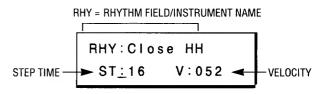


Note: If many sounds are on the same location, only one of the sound names is displayed when searching forward (turning the Dial clockwise, or to the right).

Turn the Dial counter-clockwise to break up the sounds so that you can display the sounds individually.

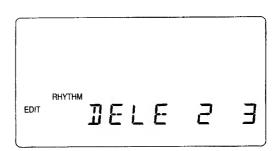
RHY(short for rhythm) field indicates instrument name.

V (short for Velocity) field indicates the Velocity value which controls the volume level of the sound.



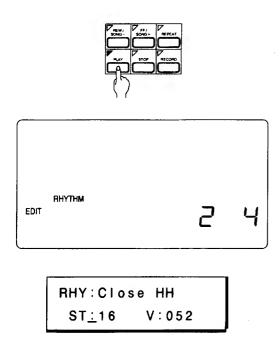
The above displays indicate that the CLOSED HH in the Step Time 16, Beat Number 3, Measure Number 2 whose Velocity value is 52.





(5) Press the REW button. The display shows "DELE" (short for DELETE). Note: Press the STOP button now if you want to cancel the deleting operation.

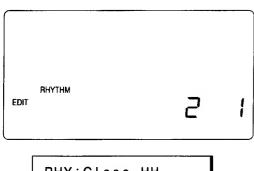
(6) Press the PLAY button to perform the deleting. When the deletion is completed, the display will show the location of the next note.



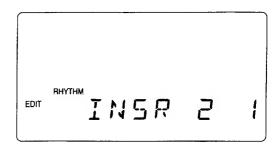
Note: You cannot delete the data located at the beginning of the song.

2-2 Inserting Data

- (7) Use the Dial to select a data which is located near the data you want to insert.
- (8) Press the FF button. The display shows "INSR" (short for INSERT).
- (9) Use the CURSOR buttons to move the cursor to a field and change the parameter on the field using the Dial.



RHY:Close HH ST<u>:</u>00 V:064 (a) ST (Step Time) field: If you want to change the beat number of the display, turn the Dial on and use with the cursor in the ST field. (When the Time Signature is 6/8, clockwise rotation of the Dial over the ST:23 adds one value to the beat number, for example.)

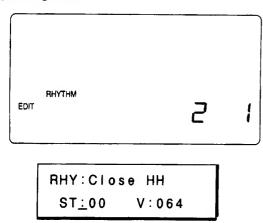


(b) RHY field: If you change the value of the RHY field on and on, the VOLUME or BEND data will replace the instrument name. You can insert the Volume or Pitch Bend message by selecting the appropriate one. The Volume level ranges from 0 to 126. The Bend value ranges from -70 to 70. Lowering the pitch to the maximum amount is equal to a Bender value of -70. Raising the pitch all the way is a value of 70.

Note: Press the STOP button now if you want to cancel the inserting operation.

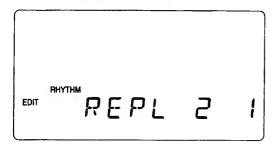
(10) Press the PLAY button to insert the data. The insertion is carried out and the display stops indicating "INSR".

2-3 Replacing Data

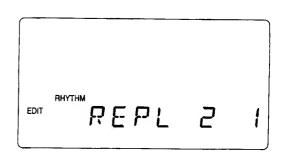


- (11) Use the Dial to select a message to replace shown in the display.
- (12) Press the REPEAT button. Display 1 will show "REPL" (short for replace).





(13) Use the CURSOR tabs to move the cursor to a field and change the parameter on the field using the Dial.



RHY<u>:</u>Close HH ST:00 V:064

Note: Press the STOP button if you want to cancel the replacing operation.

(14) Press the PLAY button to replace the data and Display 1 stops

RHY<u>:</u>Cowbell ST:00 V:064

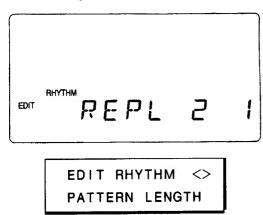
indicating "REPL". The display will show the location of the next note.

Leaving the STEP EDIT mode

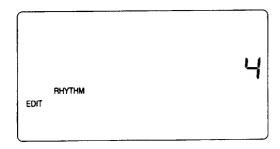
- (15) Press the RECORD button when Step Edit is finished. The RECORD button lamp will go off.
- (16) Perform the WRITE operation to store the RHYTHM pattern you created. See the Writing section on page 31 for details. If you want to cancel the pattern, press the RHYTHM button in the EDIT section before performing the WRITE operation.

3 Changing the Pattern Length

- (1) Repeat the steps 1-3 of the basic procedure. (See page 32)
- (2) Press the right CURSOR tab several times until the display shows "PATTERN LENGTH".
- (3) Use the Dial to change the parameter value of the Pattern Length.



You can select a value of 1, 2, 4, 8 or 16. See the chart in the page 31 for a value you can select for each pattern. (Ex. You can select a value of 1 or 2 for a FILL IN pattern.)



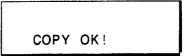
(4) Perform the WRITE operation to store your change. (See the Writing section for details.) If you want to cancel the edit, press the RHYTHM button in the EDIT section before performing the WRITE operation.

4 Copying a Rhythm

- (1) Repeat the steps 1-3 of the basic procedure. (See page 32)
- (2) Press the right CURSOR tab several times until the display shows "COPY".



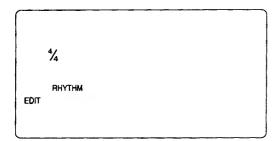
(3) Press a rhythm tab in the AUTO PLAY ORCHESTRA section. The rhythm you've selected will be copied.



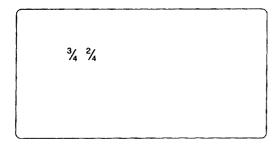
(4) Perform the WRITE operation to store the RHYTHM pattern you've copied. (See the Writing section for details.) If you want to cancel the pattern, press the RHYTHM button in the EDIT section before performing the WRITE operation.

5 Changing Beat

- (1) Repeat the steps 1 3 of the basic procedure. (See page 32)
- (2) Press the right CURSOR button several times until the display shows "BEAT CHANGE".
- (3) Use the Dial to select any one of the 6/8, 4/4, 3/4, 2/4 and 5/4.



Turn the Dial to the right until both the 3/4 and 2/4 on the display light if you want to select 5/4 beat.



(4) Perform the WRITE operation to store the edit you made.

(See the Writing section for details.) If you want to cancel the pattern, press the RHYTHM button in the EDIT section before performing the EDIT operation.

6 Editing Accompaniment and Bass parts

This section will show you how to edit your bass and accompaniment parts.

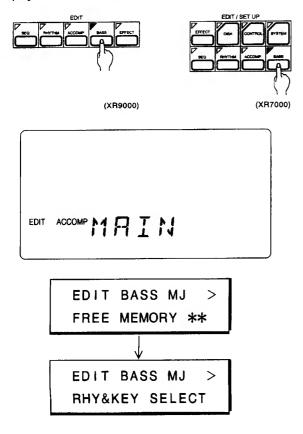
Basic Procedure for editing the Accompaniment parts;

(1) Press the ACCOMP button in the EDIT section to edit the accompaniment parts.

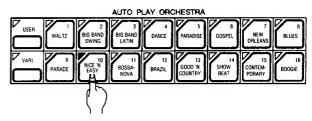


Or, press the BASS button in the EDIT section to edit the bass part. The switch lamp lights.

The display will show RHY&KEY SELECT.



(2) Select a rhythm using the AUTO PLAY ORCHESTRA tabs. If you want to create a new pattern from scratch, do not select any rhythm.

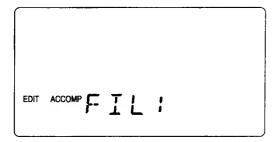


(3) Select the pattern to change using the FILL-IN and INTRO/END-ING tabs. Display will show the currently selected pattern.

If you want to edit the MAIN pattern, you do not have to press any tab.

(a) Press the FILL IN I tab to edit FILL IN I pattern.





- (b) Press the FILL IN II tab to edit FILL IN II pattern.
- (c) Press the INTRO/ENDING tab once to edit INTRO pattern.
- (d) Press the INTRO/ENDING tab twice to edit ENDING pattern.
- (e) Press the INTRO/ENDING tab once again to edit MAIN pattern.

Note: You can change the number of measures and beat of the pattern. (See pages 38, 45 for details.)

(4) Use the Dial to select the pattern to edit. The display will show the currently selected pattern.

If you are editing the accompaniment part:

EDIT AC1C MJ: Accompaniment I Chord Part for Major Chord

EDIT AC1C MJ > RHY&KEY SELECT

EDIT AC1C mn: Accompaniment I Chord Part for Minor Chord.

EDIT AC1C mn > RHY&KEY SELECT

EDIT AC1M MJ: Accompaniment I Melody Part for Major Chord

EDIT AC1M MJ > RHY&KEY SELECT

EDIT AC1M mn: Accompaniment I Melody Part for Minor Chord

EDIT AC1M mn > RHY&KEY SELECT

EDIT AC2C MJ: Accompaniment II Chord Part for Major Chord

EDIT AC2C MJ > RHY&KEY SELECT

EDIT AC2C mn: Accompaniment II Chord Part for Minor Chord

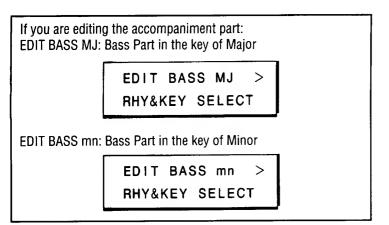
EDIT AC2C mn > RHY&KEY SELECT

EDIT AC2M MJ: Accompaniment II Melody Part for Major Chord

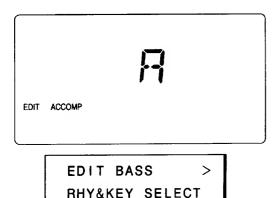
EDIT AC2M MJ > RHY&KEY SELECT

EDIT AC2M mn: Accompaniment II Melody Part for Minor Chord

EDIT AC2M mn > RHY&KEY SELECT

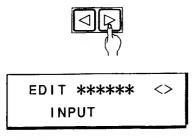


(5) (OPTIONAL) Press a key on the LOWER keyboard to select the basic key. The display will show the currently selected basic key.



BASIC KEY feature allows you to automatically transpose your input. If you do not select any BASIC KEY, your input will be determined by the intervals between "C" and your input. If you select "A" key as the BASIC KEY and input A-Major chord, you can play C-Major chord (not the A-Major chord) by playing C-Major chord using the AUTO PLAY ORCHESTRA.

(6) Press the right CURSOR tab and the display shows "INPUT". Now you are in the INPUT mode.



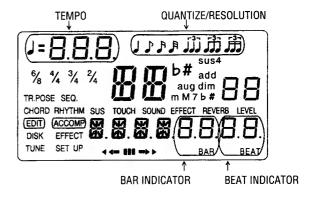
(7) Press the RHYTHM tab (not the one in the EDIT section) to turn on the tab lamp. The first two measures of the introduction are counted down, after which you can start inputting using the LOWER KEYBOARD.



Notes:

- Adjust the tempo using the Dial.
- In the INPUT mode (when the RHYTHM tab lamp is on), you can specify the quantizing value using the CURSOR tabs. When no note mark is lighting, this function does not take effect.

• If you want to cancel the pattern you created, press any button in the EDIT section without performing the WRITE operation. Press the ACCOMP or BASS button in the EDIT section to return to play mode. Or, press any other button in the EDIT section if you want to edit other part of the auto-accompaniment without storing your bass pattern.



EDIT *****
INPUT NOW...

(8) Use the LOWER keyboard to record the part.



Note: You can change the length of the part before entering the PATTERN LENGTH mode.

• When the maximum number of simultaneous sounds has been reached, you cannot input more notes. The polyphony of the each part in the input mode is: 8 notes polyphony for the Accompaniment Melody Parts, 1 note polyphony for the Accompaniment Chord Parts, 2 notes polyphony for the Bass part.

Deletina Notes

(9) Press and hold down the FF button. Data on the part you are editing will be removed as long as the FF button is held down.



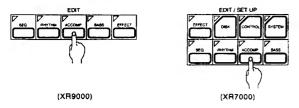
To eliminate notes of a particular pitch from the pattern, hold down the REW button and press the corresponding key for the portion you wish to delete.



(10) Press the RHYTHM tab (not the one in the EDIT section) when the inputting is completed and tab lamp will go off.



(11) Perform the WRITE operation to store the pattern you created. See the Writing section in page 32 for details. If you want to cancel the pattern, press the ACCOMP or BASS button in the EDIT section before performing the WRITE operation.

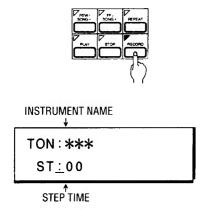


Step Time Edit



Step Edit allows you to insert, delete and replace note by note.

- (1) Repeat the steps 1 4 of the basic procedure. (See above)
- (2) Press the right CURSOR tab several times until shows "STEP EDIT". Now you are in STEP EDIT mode.
- (3) Press the RECORD tab. The RECORD tab lamp lights and the



display shows the beginning data for the part.

TON (tone) field shows the instrument name.

ST(short for Step Time) field tells you where you're at within each beat.

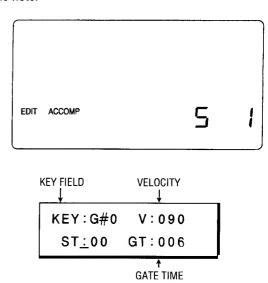
Note: You cannot delete the first two data of each part.

(4) Use the Dial to select the data to change. As you rotate the Dial, several messages appear on the display. The display shows the beat and measure number of the data. Note events sound briefly in passing to help you audibly monitor your position.

Note: If many sounds are on the same location, only one of the sound names are displayed when searching forward (turning the Dial to the right).

Turn the Dial counter-clockwise to break up the sounds so that you can display the sounds individually.

The KEY field shows the pitch of the key. The V (velocity) field controls the volume of the note. GT (Gate Time) field controls the duration of the note.



The above illustration shows that G#5 key in the Step Time 00, Beat 1, Measure 5, with Velocity value 90 and Gate Time value 006.

KEY ADJUST

KEY ADJUST raises or lowers your pattern of ACCOMPANIMENT MELODY or BASS parts by a half-note so that they match the chord you play. For example, if you input the phrase "C, D, E, F, G, A, B, C" and play it back while holding down the Cm chord on the LOWER keyboard:

- "C, D, Eb, F, G, Ab, Bb, C" will be played back if the KEY ADJUST is set to on.
- "C, D, E, F, G, A, B, C" will be played back if the KEY ADJUST is set to off.
- (5) In the STEP EDIT mode of an ACCOMPANIMENT MELODY part or a BASS part, select a note with the Dial.



(6) Press the right CURSOR tab until an asterisk appears beside the note name of the KEY field to turn off the KEY ADJUST function to the note.

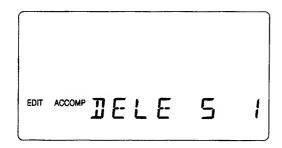


Press the left CURSOR tab until an asterisk beside the note name of the KEY field disappears if you want to apply the KEY ADJUST function to the note.

Note: Turn the Dial while holding down a CURSOR tab if you want to change the KEY ADJUST value of many notes at once.

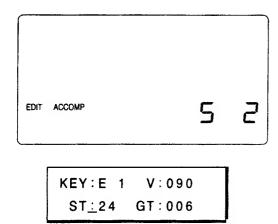
6-1 Deleting Data

- (7) Select the data to delete using the Dial.
- (8) Press the REW button. The display shows "DELE" (short for DELETE).



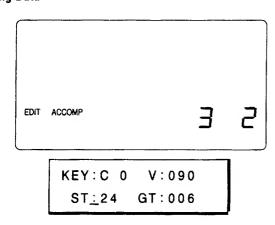
Note: Press the STOP button now if you want to cancel the deleting operation.

(9) Press the PLAY button to perform the deleting. When the deletion is completed, the display will show the information of the next note.



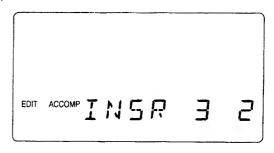
Note: You cannot delete the data located at the first of the song.

Inserting Data

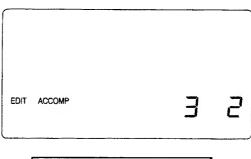


(10) Use the Dial to select a data which is located near the data you want to insert.

(11) Press the FF button. The display shows "INSR" (short for INSERT).



- (12) Use the CURSOR tabs to move the cursor to a field and change the parameter on the field using the Dial.
- (a) ST (Step Time) field: If you want to change the beat number of the display, turn the Dial with the cursor in the ST field. (When the Time Signature is 6/8, clockwise rotation of the Dial over the ST:23 adds one value to the beat number, for example.)

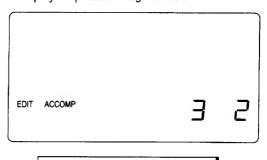


KEY:C 0 V:090 ST<u>:</u>12 GT:006

- (b) TON field: If you change the value (turn the Dial) of the TON field, the VOL (VOLUME) or BEN (BEND) data will replace the instrument name. You can insert the Volume or Pitch Bend message by selecting the appropriate one. The Volume level ranges from 0 to 126. The Bend value ranges from -70 to 70. Lowering the pitch to the maximum amount is equal to a Bender value of -70. Raising the pitch all the way is a value of 70.
- (c) S:L(short for Slope Level) field tells how fast the volume level of the notes which is located after this data change. The value range is from 0 to 31.

Note: Press the STOP button now if you want to cancel the inserting operation.

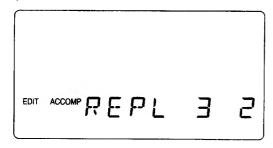
(13) Press the PLAY button to insert the data. The insertion is carried out and the display stops indicating "INSR".



KEY:C 0 V:090 ST<u>:</u>24 GT:006

6-2 Replacing Data

(14) Use the Dial to select a message to replace shown in the display. (15) Press the REPEAT button. The display will show "REPL" (short for replace).



(16) Use the CURSOR tabs to move the cursor to a field and change the parameter on the field using the Dial.

Note: TON field: If you change the value of the TON field on and on, the VOLUME or BEND data will replace the instrument name.

TON<u>:</u>Bassoon ST:12

You can replace the note data to the Volume or Pitch Bend message by selecting the appropriate one.

VOL<u>:</u>050 S:L13 ST:12

The Volume level ranges from 0 to 126. The Bend value ranges from -70 to 70. Lowering the pitch to the maximum amount is equal to a Bender value of -70. Raising the pitch all the way is a value of 70.

BEN<u>:</u>+70 S:L13 ST:12

• S:L (short for Slope Level) field tells how fast the volume level of the notes which is located after this data change. The value range is from 0 to 31.

> VOL:000 S<u>:</u>L30 ST:12

- Press the STOP button now if you want to cancel the replacing operation. (17) Press the PLAY button to replace the data and the display stops indicating "REPL". The display will show the location of the next note. Leaving the STEP EDIT mode.
- (18) Press the RECORD button when Step Edit is finished. The RECORD lamp will go off.
- (19) Perform the WRITE operation to store the pattern you created. See the Writing section in page 31 for details. If you want to cancel the pattern, press the ACCOMP or BASS button in the EDIT section before performing the WRITE operation.

6-3 Assigning Retrigger

Retrigger function stops a chord being played and allows you to play new chord. You can change chord in a short intervals using this function. The retrigger will be activated when you play a chord in the LOWER keyboard.

Performance (Gate Time) : -----

- (1) Repeat the steps 1-4 of the basic procedure. (See page 42)
- (2) Press the right CURSOR button several times until the display shows "STEP EDIT".

EDIT Effect Tremolo Setting

(3) Turn the Dial until the "R" appears at the right side of The display. Retrigger will be activated for the part. If you want to deactivate the Retrigger, turn the Dial until the "R" disappears.

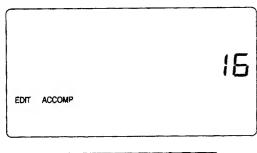
Punch In-Out End Bar 00008

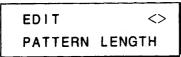
(4) Perform the WRITE operation to store the change you made. (See the Writing section for details.) If you want to cancel the edit, press the ACCOMP or BASS button in the EDIT section before performing the WRITE operation.

6-4 Changing the Pattern Length (MAIN Pattern only)

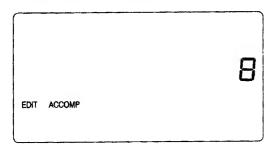
Note: You can change only the length of the pattern of the MAIN pattern. The PATTERN LENGTH of the FILL IN, ENDING, and INTRO patterns will be determined by that of the RHYTHM pattern.

(1) Repeat the steps 1 – 2 of the basic procedure. (See page 37)





- (2) Press the right CURSOR button several times until the display shows "PATTERN LENGTH".
- (3) Use the Dial to change the parameter value of the Pattern Length shown at the right side of the display.

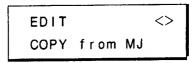


You can select a value of 1, 2, 4, 8 or 16.

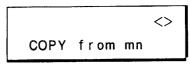
(4) Perform the WRITE operation to store the change you made. (See the Writing section for details.) If you want to cancel the edit, press the ACCOMP or BASS button in the EDIT section before performing the WRITE operation.

6-5 Copying a Pattern

- (1) Repeat the steps 1 4 of the basic procedure. (See pages 39, 40)
- (2) Press the right CURSOR button four times until the display will show "COPY from MJ".



(3) Turn the Dial to select MJ (major) or mn (minor).



(4) Press a rhythm button in the AUTO PLAY ORCHESTRA section. The rhythm you selected will be copied and "COPY OK" will be displayed.



(5) Perform the WRITE operation to store the RHYTHM pattern you copied. (See the Writing section for details.) If you want to cancel the edit, press the ACCOMP or BASS button in the EDIT section before performing the WRITE operation.

Notes:

- . Only the pattern you selected will be copied.
- Using the FILL IN buttons, you can copy either FILL IN I or II patterns.

6-6 CUT BACK

The chord root key for the ACCOMP MELODY I, II, and BASS parts changes the pitch of the chord by one octave.

- (1) Repeat the steps 1 4 of the basic procedure to select either the ACCOMP MELODY I, II, or BASS part. (See pages 39, 40)
- (2) Press the right CURSOR switch several times until the display shows "CUTBACK".

EDIT ****
CUTBACK ROOT: G

(3) Use the Dial to select any one of C - B, or C+. If you select "E", the E key will be the lowest chord root. If you select "C+", the C key one octave higher than the C key will be the lowest chord root.

EDIT ****
CUTBACK ROOT:E

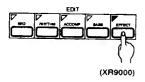
(4) Perform the WRITE operation to store the edit you made. (See the Writing section for details.) If you want to cancel the edit, press the ACCOMP or BASS button in the EDIT section before performing the EDIT operation.

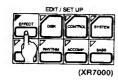
7 Effect Edit

This section will show you how to edit effect.

7-1 Flanger/Delay Select

You can select either Flanger or Delay effect to be added to the organ output.





EDIT Effect Flg/Dla Setting

- (1) Press the EFFECT button in the EDIT section. The button lamp lights. The display will show Flg/Dla (short for Flanger/Delay). Actual setting is displayed on bottom line.
- (2) Press the right CURSOR tab. The display will show the currently selected effect at the bottom.
- (3) Use the Dial to select the "Flanger"

Flg/Dla Setting :Flanger

or "Delay".

Flg/Dla Setting :Delay

- (4) Press the EFFECT button in the EDIT section again to apply the change you have made. The organ will leave the effect edit mode and return to PLAY mode. If you want to continue other effect edit, take the following procedure before leaving the effect edit mode:
- Press a CURSOR tab until the "Flg/Dla Setting" will appear on the bottom of the display. Then, start from step 2 of any other effect edit mode mentioned below.

7-2 Celeste/Ensemble Select

You can select either Ensemble or Celeste effect to be added to the organ output.

EDIT Effect Cel/Ens Setting

- (1) Press the EFFECT button in the EDIT section. The button lamp lights.
- (2) Turn the Dial until the display shows Cel/Ens (short for Celeste/Ensemble) Setting at the bottom.

- (3) Press the CURSOR tab. The display will show the currently selected effect at the button.
- (4) Use the Dial to select the "Celeste"

Cel/Ens Setting :Celeste

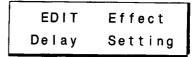
or "Ensemble".

Cel/Ens Setting :Ensemble

- (5) Press the EFFECT button to leave the Celeste/Ensemble mode or continue other effect edit using the following procedure:
- Press a CURSOR tab until the Cel/Ens Setting appears at the bottom of the display. Then, start from step 2 of any other effect edit.

7-3 Delay Setting

(1) Press the EFFECT button in the EDIT section. The button lamp lights.



(2) Turn the Dial until the display shows "Delay Setting" at the lower



Delay Setting Delay :F.B 2

side.

(3) Press the right CURSOR tab. The display will show "F.B" (short for Feedback) at the center bottom. Feedback means returning of the delayed sound to the delayed input.

The number at the right of the "F.B" indicates the signal amount to be returned.

- (4) Use the Dial to change the number within a range of 1 to 16.
- (5) Press the right CURSOR tab once again. You'll see the Delay

Delay : Time 5

Time display.

(6) Use the Dial to change the delay time value within a range of 1 to 16.

Note: You can return to the preceding edit menu by pressing the left CURSOR button.

- (7) Press the EFFECT tab to leave the Delay Setting mode or continue other effect edit using the following procedure:
- Press a CURSOR tab until the "Delay Setting" appears on the lower side of the display. Then, start from step 2 of any other effect edit.

7-4 Flanger Setting

EDIT Effect Flanger Setting

FLANGER adds a slightly delayed pitch (musical intervals) to a direct sound to simulate a flanging effect similar to the take-off and landing sounds of jet planes.

- (1) Press the EFFECT button in the EDIT section. The switch lamp lights. (2) Turn the Dial until the display shows "Flanger Setting" at the bottom.
- (3) Press the right CURSOR tab. You'll see the Flanger Speed display. In this setting, cycle for modulating flanger can be specified.

Flanger Setting Flanger:Speed 2

- (4) Use the Dial to change value within a range of 1 to 16.
- (5) Press the right CURSOR tab once again. The display will show "F.B" (short for Feedback) at the right lower side. In this setting, resonance amount of flanger can be specified.

Flanger Setting Flanger: F. B 5

(6) Use the Dial to change the value within a range of 1 to 16.

Note: You can return to the preceding edit menu by pressing the left CURSOR tab.

(7) Press the right CURSOR tab once again. You'll see Flanger Depth display.

Flanger Setting Flanger:Depth 5

In this setting, depth for modulating flanger can be specified.

- (8) Use the Dial to change value within a range of 1 to 16.
- (9) Press the EFFECT button to leave the Flanger Setting mode or continue other effect edit using the following procedure:
- Press a CURSOR tab until the "Flanger Setting" appears on the lower side of the display. Then, start from step 2 of any other effect edit.

7-5 Reverb Setting

EDIT Effect Reverb Setting

- (1) Press the EFFECT button in the EDIT section. The button lamp lights.
- (2) Turn the Dial until the display shows "Reverb Setting" at the bottom.
- (3) Press the right CURSOR tab. You'll see the Reverb Type display.
- (4) Use the Dial to select a reverb type.
- (5) Press the right CURSOR button once again. You'll see the Reverb Level display.
- (6) Use the Dial to change the Reverb Level value within a range of 1 to 16 (Normal setting is 8).

- (7) Press the EFFECT button to leave the Reverb Setting mode or continue other effect edit using the following procedure:
- Press a CURSOR button until the "Reverb Setting" appears on the lower side of the display. Then, start from step 2 of any other effect edit.

7-6 Tremolo Setting

(1) Press the EFFECT button in the EDIT section and the button lamp lights.

EDIT Effect Reverb Setting

(2) Turn the Dial until the display shows "Tremolo Setting" at the bottom.

EDIT Effect Tremolo Setting

(3) Press the right CURSOR button. You'll see the Tremolo Speed display.

Tremolo Setting
Trem : Speed 5

- (4) Use the Dial to change the Tremolo Speed value within a range of 1 to 16.
- (5) Press the EFFECT button to leave the Tremolo Setting mode or continue other effect edit using the following procedure:
- Press a CURSOR button until the "Tremolo Setting" appears on the lower side of the display. Then, start from step 2 of any other effect edit.

7-7 Sequencer Edit

Punch In/Out is a technique for re-recording specific portions of a previously recorded track.

- (1) Select a song to re-record. (See pages 24, 25, 26 for details.)
- (2) Press the SEQ button in the EDIT section. The button lamp lights and you'll see the Punch In-Out display.
- (3) Turn the Dial to select the value "ON".

(4) Press the right CURSOR button. The display shows "Track" on the lower left side.

- (5) Use the Dial to select the track you want to re-record.
- (6) Press the right CURSOR button. The display shows "Start Bar" on the lower left side.

(7) Use the Dial to select the measure number where you want to begin recording.

(8) Press the right CURSOR button. The display shows "End Bar" at the lower left side.

- (9) Use the Dial to select the measure number where you want recording to stop.
- (10) Press the SEQ button to leave the Punch In/Out Setting mode.
- (11) Press the PLAY button to start recording. New data replaces the old in the region you specified.

Note: If you press any other button in the SEQUENCER section (ex. STOP button), the Punch In/Out function will be automatically set to "OFF".

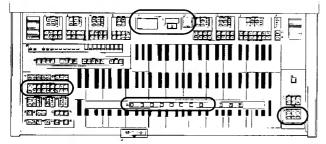
(12) Press the STOP button when you finished the recording in the region you specified. The Punch In/Out setting will be turned off automatically.

Note: When you select the lower value for the End Bar than that for the Start Bar, the End Bar value will be set to the same value as that of the Start Bar. In that case, Punch In/Out will be applied to that bar only.

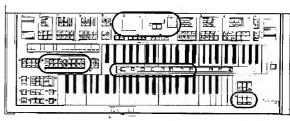
CHAPTER 3 SETUP MODE

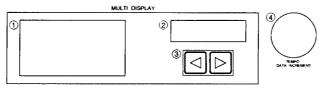
1 BASIC DISK OPERATION

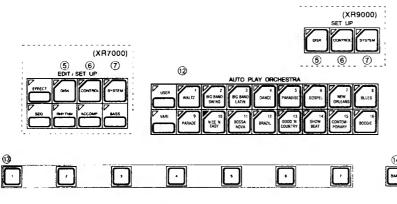
















1-1 Formatting a Floppy Disk

Formatting must be carried out when using a new disk or a disk other than one for the XR series organ.

Notes:

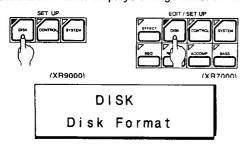
- Turn the disk write protect off (close the window) during formatting. Error message will be displayed when the write protect is on.
- The disk supplied with the XR series organ does not need to be formatted.

IMPORTANT: If a disk with data stored on it is formatted, the contents will be deleted.

(1) Insert a disk into the Disk Slot.



- (2) Press the DISK button. The DISK button lamp lights.
- (3) Press the PLAY button. Displays change as follows.



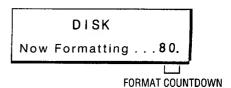


(4) Use the Dial to change the "N" (short for "No") in Display 2 to "Y" (short for "Yes").



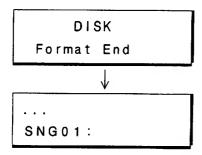
(5) Press the PLAY button to execute the format. Numbers gradually count down from 80 on Display 2 during formatting.





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(6) When the numbers reach "0", the DISK button lamp turns off. The formatting is now complete and Display will return to its normal display.



1-2 Song Copy

a. Copying Song onto the same Floppy Disk/Song Copy 1

Note: Song copy/delete/rename

• Turn the disk write protect off (close the window) during copying. Error message will be displayed when the write protect is on.

IMPORTANT: If the index number being copied to has already been recorded, the previous recording will be deleted.

- (1) Insert a disk for the XR series organ into the Disk Slot. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button. Display 2 will show "Song Copy 1".



DISK Song Copy 1

From: 0<u>1</u>-******

- (3) Press the PLAY button to enter the copy mode.
- (4) Use the REW and FF buttons to select the index number of the original song in Display 2.

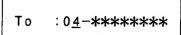


From: 03-******

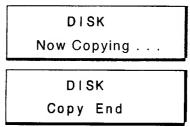
(5) Press the PLAY button once again. Display 2 shows the song number to be copied to.

DISK To :0<u>1</u>-*****

(6) Use the REW and FF buttons to select the song number to be copied to in Display 2. If the index number selected contains data, the index name is displayed.



(7) Press the PLAY button to start copying. "NOW COPYING" will appear during copying. When the copying is completed, the DISK button lamp will go out and leave the DISK mode.



b. Copying Song Data to a Separate Floppy Disk/Song Copy 2

The following procedure is for copying song data onto separate floppy disk.

Notes: The write protect for the disk to be copied to must be off (window closed) during copying.

IMPORTANT: If the index number being copied to has already been recorded, the previous recording will be deleted.

- (1) Insert the original disk. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button twice. Display 2 shows "Song Copy 2".

DISK Song Copy2

(3) Press the PLAY button to enter the copy mode.

From: 0<u>1</u>-******

(4) Use the REW and FF buttons to select the original index number to be copied in Display 2.

From:0<u>3</u>-******

(5) Press the PLAY button once again. Display 2 shows the index number to be copied to.

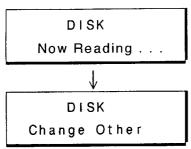
DISK To :0<u>1</u>-*****

(6) Use the REW and FF buttons to select the index number to be copied to in Display 2.

DISK To :03-*****

Note: To stop copying halfway through, press the DISK button.

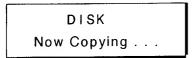
(7) Press the PLAY button. The original data will be loaded. "NOW READING" will appear during loading. When the loading is finished, Display 2 will show "CHANGE OTHER".



(8) Eject the original disk and insert the floppy disk to be copied to.



(9) Press the PLAY button. The loaded song will be copied to the disk.



"NOW COPYING" will appear during copying. If Display 2 changes as follows, insert the original disk again.

(10) Repeat steps 7 to 9 above as many times as necessary. When copying is completely finished, Display 2 will show "Copy End".

Note: The number of times you have to change disks depends on the volume of the song to copy.

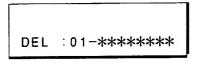
1-3 Song Deletion

This is to delete unnecessary songs from the floppy disk.

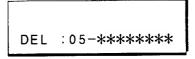
Note: Turn the disk write protect off (close the window) during deleting.

- (1) Insert a floppy disk for the XR organ. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button three times and Display 2 will show "Song Delete" menu.

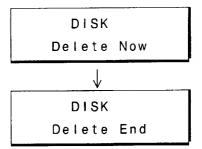
(3) Press the PLAY button to enter the Delete mode.



(4) Use the REW and FF buttons to select the song number to delete in Display 2.



(5) Press the PLAY button once again to delete the song. When the deleting is finished, the Disk button lamp will go off and Display 2 will return to the original menu.



1-4 Naming Your Own Song

This is to assign names to your songs on the floppy disk.

Note: Turn the disk write protect off (close the window) during naming.

- (1) Insert a floppy disk in the XR organ. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button four times. Display 2 shows "Song Rename".

DISK Song Rename

(3) Press the PLAY button to enter the song rename mode.

Name: 01-<u>*</u>*****

(4) Use the REW and FF buttons to select the song number to assign name in Display 2.

Name:04-<u>*</u>*****

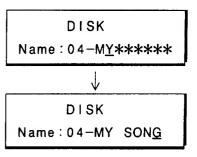
(5) Use the Dial to select a character at the cursor.

Name:04-<u>M</u>*****

(6) Use the CURSOR button to move the cursor.

!" #\$%&' () *+, -. /0123456789::<=>?
@ABCDEFGHIJKLMNOPQRSTUVWXYZ [¥] ^_
'abcdefghijklmnopqrstuvwxyz

(7) Repeat steps 5 and 6 as many times as necessary.



(8) Press the PLAY button to save the name. Display 2 changes as follows. The DISK button lamp goes out and the DISK mode is deactivated.

DISK Name End

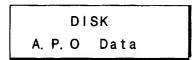
2 Saving/Loading

Saving Your Own Automatic Accompaniment

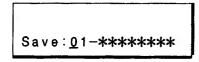
This is to save all the 16 programmable AUTO PLAY ORCHESTRA patterns as a set onto the floppy disk. You can specify any one of the 10 index numbers for saving a set of 16 patterns. Each index number can contain one song data, 16 AUTO PLAY ORCHESTRA patterns, and Registration programs.

Note: Turn the disk write protect off (close the window) during saving. (1) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.

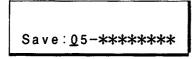
(2) Press the right CURSOR button five times. Display 2 shows "A.P.O. (short for Auto Play Orchestra) Data".



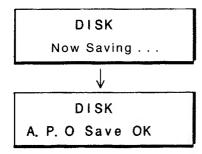
(3) Press the RECORD button to enter save mode.



(4) Use the REW and FF buttons to select the index number to save in Display 2.



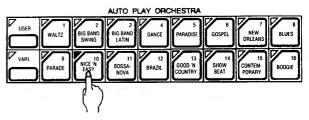
(5) Press the PLAY button to save the accompaniment data. Display 2 shows "A.P.O. Save OK" and the DISK button lamp turns off.



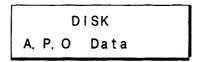
Loading Your Own Automatic Accompaniment

This is to load AUTO PLAY ORCHESTRA patterns from the floppy disk

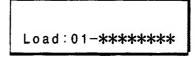
- (1) If you want to load only one pattern, press a numbered button in the AUTO PLAY ORCHESTRA section to select the location of the loaded pattern. If you want to load all the 16 USER patterns of the index number, skip this step.
- (2) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.



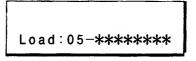
(3) Press the right CURSOR button five times. Display 2 shows "A.P.O. (short for Auto Play Orchestra) Data".



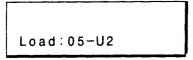
(4) Press the PLAY button to enter LOAD mode.



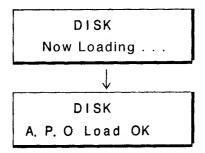
(5) Use the REW and FF buttons to select the index number to load in Display 2. If you want to load all the 16 USER patterns of the index number, skip the step 6 mentioned below.



(6) If you want to load only one pattern of the index number you selected, turn the Dial to specify the pattern. For example, "05-U2" indicates the second user pattern of the index number 5.



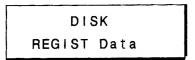
(7) Press the PLAY button to load the accompaniment data. Display 2 shows "A.P.O. Save OK" and the DISK button lamp turns off.



2-3 Saving Registration Data

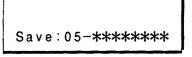
A set of internal REGISTRATION data can be saved onto a disk. (1) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.

(2) Press the right CURSOR button six times. Display 2 shows

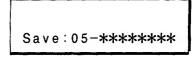


"REGIST (short for REGISTRATION) Data".

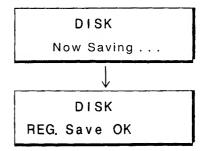
(3) Press the RECORD button to enter SAVE mode.



(4) Use the REW and FF buttons to select the index number to save in Display 2.



(5) Press the PLAY button. All the following REGISTRATION data of the organ will be saved.



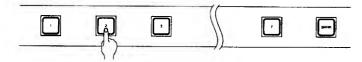
- (Panel settings just before you enter the Saving Registration mode.)
- (14 REGISTRATION memory 7 programs each for the Banks A and B). Display 2 shows "REG. Save OK" and the DISK button lamp turns off.

2-4 Loading Registration Data

This is to load your registrations from the floppy disk.

Notes: Turn the disk write protect off (close the window) during saving.

- (1) If you want to load only one registration set-up, press a numbered piston in the REGISTRATION section to select the location of the loaded pattern. If you want to load the entire set of setups, skip this step.
- (2) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.
- (3) Press the right CURSOR button six times. Display 2 shows "REGIST (short for REGISTRATION) Data".
- (4) Press the PLAY button to enter LOAD mode.
- (5) Use the REW and FF buttons to select the index number to load in Display 2. If you want to load the entire set of registration data, skip the step 6 mentioned below.



(6) If you want to load only one registration of the index number you selected, turn the Dial to specify the registration number.

Load:05-Panel

For example, "Panel" indicates the panel registration of the index number.

Load:05-Back

"Back" (Back-up) indicates the last panel registration before you press a REGISTRATION piston.

Load:05-B-4

"05-B-4" indicates the Registration number 4 of the Bank B of the index number 5.

Note: When the BANK piston light is off, the bank A is selected. When the BANK piston light is lit, the Bank B is selected. Each Bank contains 7 setups.

(7) Press the PLAY button to load the registration data.

DISK Now Loading . . .

DISK REG. Load OK

2-5 Repeat Play

This is to replay your songs continuously.

- (1) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button seven times. Display 2 shows "Repeat".

DISK Repeat

(3) Use the Dial to select "ALL" (Repeat all the songs)

DISK Rpeat : All

or "1 SONG" (Repeat one song).

DISK Rpeat :1 Song

(4) Press the PLAY button. Display 2 shows "Repeat End" and the DISK button lamp turns off.

DISK Repeat End

- (5) Press repeat button, the lamp will flash.
- (6) Press play again to execute final step for repeat play.

2-6 Tempo Play Mode

This function locks or unlocks the tempo of the disk sequencer of the organ. (1) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.

(2) Press the right CURSOR button eight times. Display 2 shows "Tempo Play Mode".

DISK Tempo Play Mode

(3) Use the Dial to select "REAL TIME"

DISK Tempo:Real Time

or "SEQ PLAY".

DISK Tempo:SEQ Play

If you select "SEQ PLAY", tempo value changes according to the tempo value of the SYSTEM track each time you use the disk sequencer. If you select "REAL TIME", the tempo can be changed by the Dial on the front panel only.

(4) Press the PLAY button. Display 2 shows "Repeat End" and the DISK button lamp turns off.

DISK Tempo Play End

2-7 MIDI Record Mode

This is to record MIDI data transmitted by an external instrument onto the disk inserted in the Disk Slot of the organ.

(1) Use an optional MIDI cable to connect the MIDI OUT jack of the other instrument to the MIDI IN jack of your organ (See pages 63, 64 for details). Then, set the MIDI "transmit" channels of the other instrument to match the MIDI "receive" channels of the organ's tracks you want to record.

The "receive" channels of the organ's tracks are as follows:

UPPER KEYBOARD Channel 1 LOWER KEYBOARD Channel 2 Channel 3 PEDAL KEYBOARD Channel 4 SOLO KEYBOARD

Channel 10 SUB TRACK (HAND PERCUSSION)

SUB TRACK (FX PRO) Channel 12

Channel 16 **SYSTEM**

Note: Program Change message is needed to record MIDI data on the MIDI channel 12. The Program Change message recorded on the MIDI channel 12 will be transmitted when playing back the SUB TRACK (12 channel).

- (2) Insert a floppy disk for the XR organ into the disk drive.
- (3) Press the DISK button. The DISK button lamp lights.
- (4) Press the right CURSOR button nine times. Display 2 shows "MIDI Record".

- (5) Press the PLAY button to enter the MIDI RECORD mode.
- (6) Select a song number to record using the REW and FF button.
- (7) Press the RECORD button. Then, press the TRACK button of the track you want to record until its button lamp flashes.





- (8) Press the PLAY button. The recording begins. The data you are recording will not be played back on the organ.
- (9) When the recording is finished, press the STOP button. The DISK button lamp turns off.

2-8 Expression Mode

This function locks or unlocks the volume of the disk sequencer of the organ.

- (1) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button ten times. Display 2 shows "EXP. (short for EXPRESSION) Mode".

DISK EXP. Mode

(3) Use the Dial to select "REAL TIME"

DISK EXP: Real Time

or "SEQ PLAY".

DISK EXP: SEQ Play

If you select "SEQ PLAY", volume changes according to the data of the SYSTEM track each time you use the disk sequencer. If you select "REAL TIME", the volume is changed by the Dial on the front panel.

(4) Press the PLAY button. Display 2 shows "Expression End" and the DISK button lamp turns off.

DISK Expression End

2-9 System Track Mode

This controls the data transferred using the SYSTEM track button in RECORDING and PLAYING BACK a song.

DISK System Tr. Mode

- (1) Insert a floppy disk. Then, press the DISK button. The DISK button lamp lights.
- (2) Press the right CURSOR button 11 times. Display 2 shows "System Tr. Mode".
- (3) Use the Dial to select "ALL"

DISK Sys: All

or "TRACK".

DISK Sys: Track

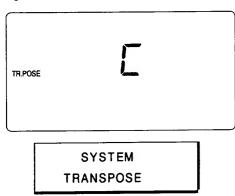
If you select ALL, 16 USER PATTERNS of AUTO PLAY ORCHESTRA data and the REGISTRATION set up when you recorded the song will be loaded on the organ in recording and playing back. If you select Track, recording and playing back begins instantly without loading USER patterns and the registration setups.

(4) Press the PLAY button. The DISK button lamp turns off.

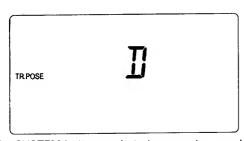
3 TRANSPOSE Function

The transpose function allows you to adjust the key up 6 semitones or down 6 semitones increments to match a vocalist or other instrument, or create special effects.

(1) Press the SYSTEM button. The SYSTEM button lamp lights and Displays change as follows.



(2) Use Dial to change the parameter of Display 1. You can adjust the parameter from -6 halfsteps (F#) to 6 halfsteps (F#).

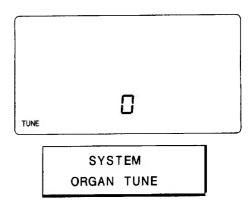


(3) Press the SYSTEM button again to leave system mode.

4 ORGAN TUNE Function

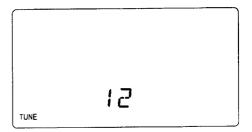
This function allows you to adjust the organ's pitch to match recordings or other instruments in ensemble.

- (1) Press the SYSTEM button. The SYSTEM button lamp lights and Displays change as follows.
- (2) Press the right CURSOR button several times until Displays change as follows. Use the Dial to change the parameter on the display.



You can adjust the parameter within a range of -64 to +63.

(3) Press the SYSTEM button again to leave system mode.

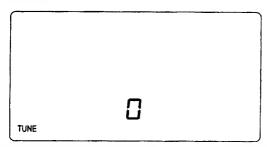


5 SYNTH. DETUNE Function

This function allows you to vary the pitch of the SYNTHESIZER sounds I and II on the XR9000 or pitch of the SYNTHESIZER and the SOLO track on the XR7000 slightly from the ORGAN TUNE pitch for a rich "Detune" sound effect.

Note: On the XR7000, detune value of the synthesizer sound for SOLO track is adjusted using this function. The SOLO track on the XR7000 is used when playing back song data you recorded with the XR9000.

- (1) Press the SYSTEM button. The SYSTEM button lamp lights and Displays change as follows.
- (2) Press the right CURSOR button several times until Displays change as follows:



For setting the SYNTHESIZER I detune.

(XR9000)

SYSTEM SYNTH, I DETUNE

For setting the SYNTHESIZER II detune.

(XR9000)

SYSTEM
SYNTH. II DETUNE

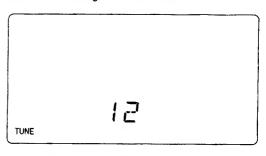
For setting the SYNTHESIZER detune.

(XR7000)

SYSTEM SYNTH DETUNE

For setting the detune value of the SOLO track. (XR7000)

SYSTEM Solo DETUNE Use the Dial to change the parameter of Display 1. You can adjust the parameter within a range of -64 to +63.



(3) Press the SYSTEM button again to leave system mode.

6 FOOT SWITCH ASSIGN Function

This function allows you to assign a function to the foot switches. (1) Press the CONTROL button. The CONTROL button lamp lights and Display 2 shows F.S-L (short for Foot Switch Left) at the left side. If you want to assign a function to the right foot switch, press the right CURSOR button and Display 2 shows "F.S-R" (short for Foot Switch Right).

(2) Use Dial to change the parameter of Display 2.

CONTROL F. S-L:STOP

You can assign any one of the following function to the foot switch.

CONTROL F. S-R:FILL&END

ASSIGNABLE FUNCTIONS

- 1.STOP: stops the rhythm and auto accompaniment.
- 2. REG. BANK: Same function as the REGISTRATION BANK piston.
- 3. REG. UP: Moves the number of the registration by a value of one. (1, 2, 3, ... 6, 7, Panel, 1, 2, ...)
- PERCUSSION: Percussion sound can be assigned to the footswitch. See the following page on to assign any one of 128 drum sounds.
- 5. SYNTH. PLUS: Synthesizer sound of the UPPER Keyboard will be activated as long as the footswitch is held.
- 6. GLIDE: Pitch of a PRESET INSTRUMENT on the UPPER KEYBOARD will drop by half-step as long as the footswitch is held down.
- 7. FILL&END: Add fill-in or ending pattern to the rhythm or auto accompaniment.

7 TOUCH BAR ASSIGN Function

This function allows you to assign a function to the TOUCH BARS in the same way as the FOOT SWITCH ASSIGN Function.

- (1) Press the CONTROL button. The CONTROL button lamp lights.
- (2) Select the "BAR-L" (short for BAR Left) or

CONTROL BAR-L:PERCUSSION

"BAR-R" (short for BAR Right) menu using the CURSOR button.

CONTROL BAR-R: PERCUSSION

Then, follow the same procedure for the FOOT SWITCH assign mentioned above. (3) Press the CONTROL button to leave the TOUCH BAR ASSIGN Function.

8 Assigning a Percussion Sound

You can assign a drum sound for "PERCUSSION" function of FOOT SWITCH or TOUCH BAR mentioned above. You can also assign a drum sound to the LOWER KEYBOARD for HAND PERCUSSION.

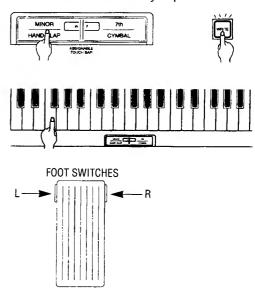
(1) Press the CONTROL button. The CONTROL button lamp lights.

CONTROL UPA:BOB BD

(2) Press the right CURSOR button several times until Display 2 shows UPA (short for User Percuss Assign) at the left side.(3) Use Dial to select any drum sound from the 128 drum sounds. You will hear the sound of the drum each time you turn the Dial.



CONTROL UPA: Cowbell (4) While holding down the WRITE piston, press a FOOT SWITCH, a TOUCH BAR, or an appropriate key on the LOWER KEYBOARD. The drum sound will be assigned to all the foot switches, TOUCH BARs, and keys on the LOWER KEYBOARD you press.



(5) Press the CONTROL button to turn off the button lamp.

CHAPTER 4 MIDI

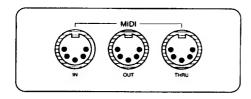
Introductions

The letters MIDI stand for the Musical Instrument Digital Interface, an international standard for connecting synthesizers, drum machines and other electronic musical instruments so that they can exchange keyboard program and other types of data. Through this interface, the organist can play a wide variety of instruments from a single instrument. (The types of data that may be controlled vary with the instruments connected through this interface.)

Your new Kawai XR organ is GENERAL MIDI and reads (SMF)
 Standard MIDI Files.

1 Connectors

Instruments with the MIDI interface feature the following three receptacles which accept the DIN plugs on MIDI cables.

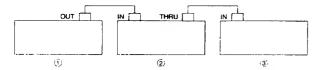


IN Accepts the incoming data.

OUT Transmits keyboard, program, and other types of data.
THRU Passes the data received on to another instrument.

2 Connections

The MIDI interface allows electronic musical instruments to exchange keyboard, program, and other types of data. The instruments can be connected so that the data flows only one way — with only one instrument transmitting and the other(s) receiving — or so that data flows both ways. The organist specifies the data pathways by connecting the MIDI OUT terminal of the transmitting instrument to the MIDI IN terminals of the receiving one. The data received may also be retransmitted to other instruments through the MIDI THRU terminal.



Channels

Since the MIDI interface can connect several instruments at once, the organist needs a way to specify which instrument is to play. This is done by assigning channel numbers, numbers between 1 and 16, to the instruments.

3 Features

The XR Series organ transmits and receives the following type of data via MIDI.

(a) Keyboard Data

By connecting the organ to a synthesizer, the organist can play the organ from the synthesizer keyboard and vice versa.

(b) Channel specification

The organ always assigns the following MIDI channels to the keyboard in transmitting and receiving MIDI data.

UPPER KEYBOARD
LOWER KEYBOARD
PEDAL KEYBOARD
SOLO KEYBOARD (XR9000 only)
SUB TRACK (HAND PERCUSSION)
SUB TRACK (FX PRO)
SYSTEM

(c) Program change

The organist can send a sound change command to an external keyboard to change sound and vice versa.

(d) Volume control

The organist can control the volume of an external keyboard from the organ and vice versa. Your XR series organ can transmit or receive MIDI EXPRESSION message on channel 16. (EXPRESSION message on other channels cannot be received nor transmitted.) (e) Clock signals

Signals from the organ can synchronize the rhythm tempo of an external MIDI device with those of the organ.

Note: These functions are effective only if the devices are equipped with these features (see pages 73, 74).

4 Connecting Examples:

When the XR series organ is the transmission side: When each of the TRACK SELECT buttons are on (lit), MIDI is turned on.

Playing a synthesizer from the UPPER keyboard of the organ. (1) Using a MIDI cable, connect the MIDI OUT terminal on the organ to the MIDI IN terminal on the synthesizer so that the organ can control the synthesizer.



- (2) Set up the synthesizer to receive on channel 1. (Refer to the synthesizer's instruction manual for the procedure.)
- (3) Press the UPPER button on the TRACK SELECT section to turn the button lamp on. All notes played on the UPPER keyboard will sound on the synthesizer.

When the XR series organ is the Reception side:

When each of the TRACK SELECT buttons are on (lit), MIDI is turned on. Playing the UPPER keyboard of the organ from a synthesizer.

(1) Using a MIDI cable, connect the MIDI IN terminal on the organ to the MIDI OUT terminal on the synthesizer so that the synthesizer can control the organ.



- (2) Set up the synthesizer to transmit on channel 1. (Refer to the synthesizer's instruction manual for the procedure.)
- (3) Press the UPPER button on the TRACK SELECT section to turn the lamp on. All notes played on the synthesizer will sound on the UPPER keyboard.

Note: Some notes may be lost if the organ and other instruments have a different number of keys on their keyboards.

WARNING

• Turning off the power or disconnecting the interface cable while a sound is being played may cause the receiving instruments to sound continuously.

Cut the power to silence the instrument.

- In certain situations (described below), deactivating the MIDI interface while a key is pressed may also produce the same undesired effect. This only happens when:
- (a) the receiving instrument is in the OMNI ON mode and
- (b) the two instruments have been assigned different channels. The best way to prevent this is to ignore the OMNI ON mode and assign both instruments to the same channel. If it does occur, however, either turn off the receiving instrument or turn the MIDI interface back on and play something on the keyboard.

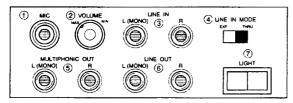
Synchronous Performances with connected instruments By using MIDI, electronic organ rhythms can be played synchronously with other instruments.

A start/stop signal is out put from the XR series organ during the following times:

- (1) Starting or stopping disk sequencer recording or replay.
- (2) Starting or stopping a rhythm or automatic accompaniment.
- (3) A stop signal is transmitted when the rhythm select button that is lit is pressed, and soon afterwards a start signal is transmitted. However, when the disk sequencer is recording or replaying, a start or stop signal will not be transmitted even when the item (2) or (3) above occurs.

CHAPTER 5 FRONT AND REAR PANEL CONNECTORS

Front Panel Connectors





Your organ is equipped with the following features located under the right side of the lower keyboard.

(1) MIC

Allows vocals through the XR speaker system.

(2) VOLUME

To regulate microphone volume, turn this Dial clockwise to increase volume.

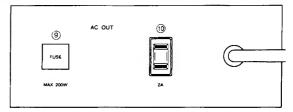
(3) LINE IN

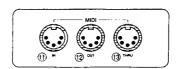
Receives the signals from your cassette tape decks or other audio equipment.

(4) LINE IN MODE

If you set this switch to "EXP", you can control the LINE IN volume with the EXPRESSION PEDAL. If you set this switch to "THRU", the EXPRESSION PEDAL will not control the LINE IN volume.

Rear Panel Connectors





(5) MULTIPHONIC OUT

When the MULTIPHONIC button lamp on the front panel is lit, the same signal as MULTIPHONIC speakers inside the organ will be output from this jack.

(6) LINE OUT

To be used with cassette tape decks or other audio equipment.

(7) LIGHT

Turns the cove and pedal lights of your organ on or off.

(8) **HEADPHONE**

With a headphone plugged in this jack, you can enjoy playing your organ without t disturbing others.

DRUM ASSIGNMENT

Note: Instruments for the keys between C5 and the C6 are not available with the XR7000.

APPENDIX

UPA PERCUSSION LIST

BOB BD	Saussa Clink	Lo Congo	Payers Curr
	Square Click	Lo Conga	ReverseCym.
BOB Rim	Metronome Click	Hi Timbale	Brush Tap
BOB SD	Metronome Bell	Lo Timbale	Brush Slap
BOB LoTom2	Ac Bass Drum 2	High Agogo	Brush Swir
BOB CloseHH.	Bass Drum 1	Lo Agogo	Jazz BD
BOB LoTom1	Side Stick	Cabasa	Concert BD2
BOB MidTom2	Ac Snare 1	Maracas	Consert BD1
BOB OpenHH	HandClap	Short Whistle	Concert SD
BOB MidTom1	Ac Snare2	Long Whistle	Timpani F
BOB HiTom2	Low F Tom	Short Guiro	Timpani F#
BOB Cym.	CloseHH	Long Guiro	Timpani G
BOB HiTom1	Hi F Tom	Claves	Timpani G#
BOB Cowbell	Pedal HH	Hi Wood Block	Timpani A
BOB HiConga	Low Tom	Lo Wood Block	Timpani A#
BOB MidConga	Open HH	Mute Cuica	Timpani B
BOB LowConga	Low-Mid-Tom	Open Cuica	Timpani C
BOB Maracas	Hi-Mid-Tom	Mute Triangle	Timpani C#
BOB Claves	TopCym1	Open Triangle	Timpani D
MONDO Kick	High Tom	Shaker	Timpani D#
Gated SD	SidCym1	Jingle bell	Timpani E
PowerTomLow2	ChinaCym.	Belitree	Timpani F
PowerTomLow1	RideBell	Castanets	Concert Cym2
PowerTomMid2	Tambourine	MuteSurdo	Concert Cym1
PowerTomMid1	SplashCym.	OpenSurdo	Applause
PowerTomHi2	Cowbell	Elec.BD	Room Tom Low2
PowerTomHi1	TopCym2	Elec.SD	Room Tom Low1
MUTE	Vibraslap	Elec.Lo Tom2	Room Tom Mid2
HighQ	SidCym2	Elec.Lo Tom1	Room Tom Mid1
Slap	Hi Bongo	Elec.Mid Tom2	Room Tom Hi2
Scratch Push	Lo Bongo	Elec.Mid Tom1	Room Tom Hi1
Scratch Pull	Mute Hi conga	Elec.Hi Tom2	EFF Clap
Sticks	Open Hi conga	Elec.Hi Tom1	Echo Gras

DRUM SETS

XR9000

-	y Name	Drum Set #1	Drum Set #2	Drum Set #3
C1	0#4	Bass Drum 1		Belltree
Ċ	C#1	Side Stick	1.416.00	Castanets
D1	2044	Ac Snare 1		MuteSurdo
E1	D#1	HandClap		OpenSurdo
F1		Ac Snare2 Low F Tom		Elec.BD
-	F#1	CloseHH		Elec.SD
G1	181			
Gi	G#1	Hi F Tom	Callet Commenters	Elec.Lo Tom1
A1	G#1	Low Tom		Elec.Mid Tom2
A 1	A 441			Elec.Mid Tom1
В1	A#1	Open HH		Elec.HI Tom2
C2		Low-Mid-Tom Hi-Mid-Tom	BOR DD	Elec.Hi Tom1
-02	C#2		BOB BD	ReverseCym.
D2	UNZ	TopCym1	BOB Rim	Brush Tap
	D#2	High Tom SidCym1	BOB SD	Brush Slap
E2	D#Z		BOB LeTem2	Brush Swir
F2		ChinaCym. RideBell	BOB CloseHH.	Jazz BD
	F#2	Tambourine	BOB LoTom1	Concert BD2
G2	172	SplashCym.	BOB MidTom2	Concert BD1
	G#2	Cowbell	BOB OpenHH BOB MidTom1	Concert SD
A2	GAZ		BOB HiTom2	Timpani F
74	A#2	TopCym2 Vibrasiap	BOB Cym.	Timpani F#
В2	742	SidCym2		Timpani G
C3		Hi Bongo	BOB HiTom1 BOB Cowbell	Timpani G#
03	C#3	Lo Bongo	·	Timpani A
D3	U#3	Mute Hi conga	BOB HiConga BOB Midconga	Timpani A#
	D#3	Open Hi Conga		Timpani B
E3	D#3	 	BOB LowConga	
F3		Lo Conga Hi Timbale	BOB Maracas	Timpani C#
	F#3	Lo Timbale	BOB Claves	Timpani D
G3	F#3		MONDO Kick Gated SD	Timpani D#
	G#3	High Agogo		Timpani E
А3	G#3	Lo Agogo	PowerTomLow2	Timpani F
A3	A#3	Cabasa Maracas	PowerTomLow1	Concert Cym2
B 3	783	Short Whistle	PowerTomMid2	Concert Cym1
C4		 	PowerTomMid1	Applause
U#	C#4	Long Whistle	PowerTomHi2	Room Tom Low2
D4	- CF4		PowerTomHi1	Room Tom Law1
04	0#4	Long Guiro	**MUTE**	Room Tom Mid2
E4	D#4	Claves	HíghQ	Room Tom Mid1
F4		Hi Wood Block	Slap	Room Tom Hi2
F #	F#4		Scrach Push	Room Tom Hi1
G4	F#4	Mute Cuica Open Cuica	Scrach Pull	EFF Clap
G#	044		Sticks	Echo Gras
A4	G#4	Mute Triangle	Square Click	
A4	A#4	Open Triangle	Metronome Click	
B4	7.94	Shaker	Metronome Beil	11.727 7
C5		Jingle bell Belltree	Ac Bass Drum 2	
U J	C#5		Bass Drum 1	
D5	C#8	Castanets	Side Stick	
DS	Due	MuteSurdo	Ac Snare 1	
E 5	D#5	OpenSurdo	HandClap	
E5		Elec.BD	Ac Snare2	
F5	600	Elec.SD	Low F Tom	
^r	F#5	Elec.Le Tom2	CloseHH	1 1
G5	Co	Elec.Lo Tom1	Hi F Tom	
	G#5	Elec.Mid Tom2	Pedal HH	
45	A AME	Elec.Mid Tom1	Low Tom	
	A#5	Elec.Hi Tom2	Open HH	¥
35	W. W.	Elec.Hi Tom1	Low-Mid-Tom	
26		ReverseCym.	Hi-Mid-Tom	

XR7000

Kev	/ Name	Drum Set #1	Drum Set #2	Drum Set #3
C1		Bass Drum 1	D10111 001 #2	Belltree
	C#1	Side Stick	- E.	Castanets
D1	<u> </u>	Ac Snare 1		MuteSurdo
	D#1	HandClap		OpenSurdo
E1		Ac Snare2		Elec.BD
F1		Low F Tom		Elec.SD
ļ	F#1	CloseHH		Elec.Lo Tom2
G1	L	Hi F Tom		Elec.Lo Tom1
	G#1	Pedal HH		Elec.Mid Tom2
A1		Low Tom		Elec.Mid Tom1
	A#1	Open HH		Elec. HI Tom2
В1	·	Low-Mid-Tom		Elec.Hi Tom1
C2		Hi-Mid-Tom	BOB BD	ReverseCym.
	C#2	TopCym1	BOB Rim	Brush Tap
D2		High Tom	BOB SD	Brush Slap
	D#2	SidCym1	BOB LoTom2	Brush Swir
E2	L	ChinaCym.	BOB CloseHH.	Jazz BD
F2		RideBell	BOB LoTom1	Concert BD2
	F#2	Tambourine	BOB MidTom2	Concert BD1
G2	<u></u>	SplashCym.	BOB OpenHH	Concert SD
	G#2	Cowbell	BOB MidTom1	Timpani F
A2	<u></u>	TopCym2	BOB Cym.	Timpani F#
	A#2	Vibreslap	BOB HITom2	Timpani G
B 2		SidCym2	BOB HiTom1	Timpani G#
СЗ		Hi Bongo	BOB Cowbell	Timpani A
	C#3	Lo Bongo	BOB HiConga	Timpani A#
D3		Mute Hi conga	BOB MidConga	Timpani B
	D#3	Open Hi Conga	BOB LowConga	Timpani C
E3		Lo Conga	BOB Maracas	Timpani C#
F3		Hi Timbale	BOB Claves	Timpani D
	F#3	Lo Timbale	MONDO Kick	Timpeni D#
G3		High Agogo	Gated SD	Timpani E
-	G#3	Lo Agoga	PowerTomLow2	Timpani F
А3		Cabasa	PowerTomLow1	Concert Cym2
	A#3	Maracas	PowerTomMid2	Concert Cym1
ВЗ		Short Whistle	PowerTomMid1	Applause
C4		Long Whistle	PowerTomHi2	Room Tom Low2
	C#4	Short Guiro	PowerTomHi1	Room Tom Low1
D4		Long Guiro	**MUTE**	Room Tom Mid2
	D#4	Claves	HighQ	Room Tom Mid1
E4		Hi Wood Block	Slap	Room Tom Hi2
F4		Lo Wood Block	Scrach Push	Room Tom Hi1
	F#4	Mute Cuica	Scrach Pull	EFF Clap
G4		Open Cuica	Sticks	Echo Gras
	G#4	Mute Triangle	Square Click	7
A4		Open Triangle	Metronome Click	
	A#4	Shaker	Metronome Bell	
B4		Jingle bell	Ac Bass Drum 2	
C5		Belitree	Bass Drum 1	

XR9000/XR7000 SPECIFICATIONS

		XR9000	XR7000
Keyboard (Solo/Upper/Lower/Pe	edal)	44/61/61/25	-/49/49/20
Keyboard Solo		Synth I, Synth II, Preset Instrument	
Conductor Upper		Tiba/Percu., Orchestra I, Orchestra II, Preset Instrument, Synth I	Tibia/Percus., Orchestra, Preset Instrument, Synthesizer
	Lower	Tibia, Orchestra I, Orchestra II, Preset Instrument	Tibia, Orchestra, Preset Instrument, Synthesizer
	Pedal	Tibia, Orchestra, Synth I, Synth II	Tibia, Orchestra
Tibia/Percus.	Upper	16', 8', 5-1/3', 4', 2-2/3', 2', 1-3/5', 1-1/3', 1'	
		Percus. 5-1/3', 4', 2-2/3', 2', Click	Percus. 4', 2-2/3'
	Lower	16', 8', 5-1/3', 4', 2-2/3', 2', 1-3/5', 1-1/3', 1'	8', 4', 2-2/3', 2'
	Pedal	16', 8'	
Orchestra	Upper	8 tone colors x 4	8 tone colors x2
	Lower	8 tone colors x 4	8 tone colors x2
	Pedal	8 tone colors x 2 (FX PRO 128 voices)	6 tone colors
Preset Instruments	Upper	8 tone color x 4	
	Lower	8 tone color x 2 (FX PRO 128 voices)	
Synthesizer	- L	14 tone colors x 4	12 tone colors x2
Effect		13 effects + Digital Reverb, Effect Edit	
Hand Percussion		128 Percussions	
A.P.O. (Auto Play Orch	iestra)	16 Preset x 2, 16 User Styles	
A.P.O. (Auto Play Orch System	iestra)	Rhythm, Bass, Accompaniment I (Chord, Melody, Rhythm Volume, Rhythm Tone, Accompaniment	Effect) Accompaniment I (Chord, Melody, Effect) Volume, Accompaniment II Volume
Registration Memory		7 buttons x 2, Drawbar, Rhythm Fix	
Disk Sequencer		Maximum 10 songs, 7 tracks (6 tracks = XR7000) Punch-In/Out, Resolution 48 General MIDI (SM), Real-Time Recording F)
Multi Function Display		Color Display, Letter Character Display	
Other Functions		Up-Down Button, Increment Dial, Tap Tempo, One Tune, Transpose, Multiphonic, Panel Light, Knee I Assignable Foot Switch (LR), Assignable Switch (Lever, Expression Pedal,
External Jacks		Headphone, Input, Line-In (LR), Line-Out (LR), M MIDI (In, Out, Thru), AC Outlet, Line In Mode	ultiphonic (LR), MIC, Mic Volume,
Output Power		210 W	150 W
Speaker		25cm x 1, 20cm x 2, 12.8 x 7.8cm x 2, 8cm x 2	25cm x1, 20cm x 2, 12.8 x 7.8cm x 2, 5cm x 2
Current Supply		AC 120 V, 60Hz	
Power Consumption		180 W	155 W
Measurements		1347 x 675 x 1135 (cm)	1216 x 570 x 1043 (cm)
Weight (Bench) (Pedal))	113 (17) (28) kg	95 (6) kg
Finish		Traditional Rosewood, Snow white polish	Traditional Satin Rosewood, Snow white Polish

A.P.O. PATTERN LIST

AUTO PLAY ORCHESTRA



TROUBLE SHOOTING (WAIT, IT'S NOT BROKEN!)

Symptom	Cause/Check
PLAY MODE 1. The keyboard makes no sound.	Select the tone block for a keyboard using the KEYBOARD CONDUCTOR tabs. Please note that the tone for the LOWER keyboard you selected with the KEYBOARD CONDUCTOR tabs will not play if you are using the AUTO PLAY ORCHESTRA feature with the one
2. The product generates noise.	finger chord button. Motors, neon, or other equipment can be a source of electrical interference creating noise in the sound output. Try changing locations and plug into an outlet that is not being used by devices that draw a lot of current.
3. You can hear the TV or radio sound.	This may happen when there is a broadcasting station near the organ. Consult your authorized KAWAI dealer.
4. The Drawbar sound repeats in the high pitch registers.	This is not a defect. The DRAWBAR 1-3/5, 1-1/3, and 1 sounds are designed to repeat in the high pitch range.
5. TREMOLO not working.	TREMOLO is not available when the CHORUS tab is off. Press both the TREMOLO and CHORUS tabs to activate the TREMOLO effect or tremolo speed is set too slow.
6. Percussion not sounding.	Percussion sound may not be available in legato playing. Release the first note and then play the next note.
7. Touch feature is not available in the PEDAL keyboard	This is not a defect. The XR7000 PEDAL keyboard has no touch feature. The XR9000 PEDAL keyboard responds to initial touch only. After touch effect for the SYNTHESIZER section is not available.
8. Rhythm or auto-accompaniment does not start.	Rhythm or auto-accompaniment part will not start when the button lamp for each section is not lit. Press the button to turn on each section.
9. Hand Percussion does not sound.	Hand Percussion sound is not available for every key. See the chart on page 76 for details.
10. Rhythm part cannot be controlled with the foot switches.	Rhythm part cannot be controlled with the foot switches when other types of functions are assigned to the switches.
11. Knee Lever function is not available.	Knee lever does not function if the "KNEE LEVER function" is deactivated with the KNEE LEVER setting mode.
12. Ending does not start.	Pressing the INTRO/ENDING tab only does not start the Ending pattern. Ending starts when you pressing the INTRO/ENDING switch during the rhythm performance, and then press the footswitch or the TOUCH BAR to which the FILL/ENDING feature is assigned.
13. The chord you play on the LOWER keyboard is not displayed on the display.	There are some chords and/or inversions that your organ cannot recognize. See the "CHORD CHART" on the page 76 for the chords that the XR series organ can recognize.
14. The REGISTRATION feature does not recall the setup you want to recall.	 (a) When the DRAWBAR piston lamp is not lit, the current drawbar tone is selected instead of the Drawbar tone of the Registration memory. (b) When the RHYTHM FIX switch lamp is lit, the AUTO PLAY ORCHESTRA settings will not be called up.
15. Disk Sequencer recording is not available.	 (a) Turn the disk write protect off (close the window of the disk). (b) Format the floppy disk with your XR series organ. (c) When there is little memory left in the disk, you may not be able to record a song. Use a floppy disk which has enough memory space for recording. (d) If the PUNCH IN-OUT feature is activated, the punch in recording will start instead of the normal recording. In that case, deactivate the PUNCH IN-OUT setting with the Sequencer Edit Mode.
16. Pressing the PLAY or RECORD switch does not playback or record immediately.	It takes some time to save or load registration and rhythm data when the SYSTEM track button is activated. Turn the SYSTEM track button off to deactivate the saving/loading to start playback or recording quickly.

TROUBLE SHOOTING (WAIT, IT'S NOT BROKEN!)

Symptom	Cause/Check
EDIT MODE	
You cannot WRITE the rhythm or auto accompaniment pattern you edited.	 You cannot perform the WRITE operation with the following setting. (a) If you forget to turn off the RHYTHM button lamp (not the one in the EDIT section) after creating your pattern in INPUT mode, pressing the WRITE piston does not turn on the WRITE piston lamp. (Writing is impossible.) (b) If you changed a parameter in STEP EDIT mode and have not pressed the PLAY button to carry out the edit, pressing the WRITE piston does not turn on the WRITE button lamp. (Writing is impossible.) (c) If you forget to turn off the RECORD button lamp after creating your pattern in STEP EDIT mode, pressing the WRITE piston does not turn on the WRITE button lamp. (Writing is impossible.)
Instrument sounds other than the percussion sound will play in INPUT mode.	Deactivate the section of the LOWER keyboard with the KEYBOARD CONDUCTOR tabs.
In INPUT mode, you cannot record the part with the timing you want.	Select the appropriate quantizing note value with the CURSOR buttons.
Turning the Dial clockwise does not display every note.	If many sounds are on the same location, only one of the sound names is displayed when searching forward (clockwise). Turn the Dial counter-clockwise to break up the sounds so that you can display the sounds individually.
5. The same chord will be played regardless of the key you input in editing the CHORD part of the AUTO PLAY ORCHESTRA.	This is not a defect. You can select timing only in editing the CHORD part of the AUTO PLAY ORCHESTRA.
Different note for the Accompaniment Melody or Bass part than you input will be played back.	 (a) If you activate the KEY ADJUST function, some notes of ACCOMPANIMENT MELODY or BASS parts may be raised or lowered by a half-note so that they match the chord you play. (b) Your input will be automatically transposed if you set the BASIC KEY other than "C".
7. Accompaniment or Bass part sounds differently depending on the chord you play.	Either of the "MAJOR GROUP" or "MINOR GROUP" pattern will play depending on the chord you play.
SETUP MODE	
You cannot change the contents of the disk (ex. Formatting is impossible).	Turn the disk write protect off. Disk is write protected (close the window).
2. Error message will be displayed.	If you cancel or operate the disk function inadequately, error message may be displayed.

MIDI IMPLEMENTATION CHART

XR9000/XR7000 MIDI IMPLEMENTATION CHART (TRANSMIT)

	FUNCTION		SOLO KEYBOARD (XR9000 only)	UPPER KEYBOARD	LOWER KEYBOARD	PEDAL Keyboard	SUB TRACK	SYSTEM	REMARK
BASIC CHANNEL	ON	WHEN TURN ON SELECTABLE	4 X	1 X	2 X	3 X	10, 12 X	16 X	
MODE	ON	WHEN TURN ON MESSAGE SUBSTITUTION	- X -	- X -	- X -	- X -	– X –	- X -	
		NOTE NUMBER KEY NUMBER	53–96 –	36–96* 48–96**	36–96* 36–84*		†0–127 (10ch) 36–96 (12ch)	X X	*XR9000 **XR7000
VELOCITY		NOTE ON NOTE OFF	† V = 1 • 127 X	† V = 1 • 127 X	† V = 1 • 127 X	† V = 1 • 127* † V = 1 • 64** X	† X	X X	*XR9000 **XR7000
AFTER TOUCH		BY KEY BY CHANNEL	X †	X †	X t	X X	X X	X X	
PITCH BORDER			х	X	Х	Х	Х	X	
CONTROL CHANGE		11 7						†	EXP. VOLUME (MAIN)
PROGRAM CHANGE		SELECTABLE	Х	Х	Х	х	Х		
		EXCLUSIVE			t		- -		
COMMON		SONG POSITION SONG SELECT TUNE			X X X				
REAL TIME		CLOCK COMMAND			†				(FA, FC)
OTHERS		LOCAL ON/OFF ALL NOTE OFF ACTIVE SENSING RESET			X † † X				(123)
REMARK									

MODE 1: OMNI ON, POLY MODE 2: OMNI ON, MONO

MODE 3: OMNI OFF, POLY MODE 4: OMNI OFF, MONO t = YES X = NO

MIDI IMPLEMENTATION CHART

XR9000/XR7000 MIDI IMPLEMENTATION CHART (RECEIVE)

	FUNCTION		SOLO KEYBOARD (XR9000 only)	UPPER KEYBOARD	LOWER KEYBOARD	PEDAL KEYBOARD	SUB TRACK	SYSTEM	REMARK
BASIC CHANNEL	ON	WHEN TURN ON SELECTABLE	4 X	1 X	2 X	3 X	10, 12 X	16 X	
MODE	ON	WHEN TURN ON MESSAGE SUBSTITUTION	3 X X	3 X X	3 X X	3 X X	3 X X	3 X X	
		NOTE NUMBER KEY NUMBER	0 – 127 18 – 114	0 – 127 18 – 114	0 – 127 18 – 114	0 – 127 18 – 114	0 – 127	Х	
VELOCITY		NOTE ON NOTE OFF	† V = 1 • 127 X	† V = 1 • 127 X	† V = 1 • 127 X	t V = 1 • 127* t V = 1 • 64** X	† X	X X	*XR9000 **XR7000
AFTER TOUCH		BY KEY BY CHANNEL	X †	X †	X +	X †	X X	X X	
PITCH BORDER			Х	Х	Х	Х	Х		
CONTROL CHANGE		11 7						†	EXP. VOLUME (MAIN)
PROGRAM CHANGE		SELECTABLE	Х	Х	Х	Х	Х	х	
		EXCLUSIVE			†				
COMMON		SONG POSITION SONG SELECT TUNE			X X X				
REAL TIME		CLOCK COMMAND			†				(FA, FC)
OTHERS		LOCAL ON/OFF ALL NOTE OFF ACTIVE SENSING RESET			X † † X				(123)
REMARK					· · · · · · · · · · · · · · · · · · ·				

MODE 1: OMNI ON, POLY MODE 2: OMNI ON, MONO MODE 3: OMNI OFF, POLY

MODE 4: OMNI OFF, MONO

t = YESX = NO

FX PRO SOUNDS

r		1			T
No.	Sound	No.	Sound	No.	Sound
1	GrPiano	44	Contra	87	Fifth Ld
2	BrPiano	45	TremStrg	88	Bass & Ld
3	ElGrand	46	Pizzicto	89	NewAgePd
4	HnkyTonk	47	Harp	90	Warm Pd
5	ElPiano1	48	Timpani	91	PolySyPd
6	ElPiano2	49	StrgEns1	92	Choir Pd
7	Hrpschrd	50	StrgEns2	93	Bowed Pd
8	Clavi	51	SynStrg1	94	Metal Pd
9	Celesta	52	SynStrg2	95	Halo Pd
10	Glocken	53	AahChoir	96	Sweep Pd
11	MusicBox	54	OohChoir	97	Rain
12	Vibes	55	SynChoir	98	SoundTrk
13	Marimba	56	Orch Hit	99	Crystal
14	Xylophon	57	Trumpet	100	Atmosphr
15	TubulBel	58	Trombone	101	Bright
16	Dulcimer	59	Tuba	102	Goblin
17	DrawOrgn	60	Mute Trmp	103	Echoes
18	PercOrgn	61	FrenchHr	104	SciFi
19	RockOrgn	62	BrasSect	105	Sitar
20	ChrcOrgn	63	SynBras1	106	Banjo
21	ReedOrgn	64	SynBras2	107	shamisen
22	Acordion	65	SprnoSax	108	Koto
23	Harmnica	66	Alto Sax	109	Kalimba
24	TangoAcd	67	TenorSax	110	Bagpipe
25	NylonGtr	68	Bari Sax	111	Fiddle
26	SteelGtr	69	Oboe	112	Shanai
27	JazzGtr	70	EnglHorn	113	TnkiBell
28	CleanGtr	71	Bassoon	114	Agogo
29	MuteGtr	72	Clarinet	115	Stl Drum
30	Ovrdrive	73	Piccolo	116	WoodBlok
31	Distortd	74	Flute	117	TaikoDrm
32	Harmnics	75	Recorder	118	MelodTom
33	WoodBass	76	PanFlute	119	SynthTom
34	FngrBass	77	Bottle	120	RevCymbl
35	PickBass	78	Shakhach	121	FretNoiz
36	Fretless	79	Whistle	122	BrthNoiz
37	SlapBas1	80	Ocarina	123	Seashore
38	SlapBas2	81	SquareLd	124	BrdTweet
39	SynBass1	82	Saw Ld	125	Telphone
40	SynBass2	83	CaliopLd	126	Helicptr
41	Violin	84	Chiff Ld	127	Applause
42	Viola	85	CharanLd	128	Gunshot
43	Cello	86	Voice Ld		

CHORD DETECTION CHART

XR9000

	sus4	aug	_ .	5
C add 9	_ 7	sus4 7		9
C 76 9	C , , 9	[7 * 1 1		13
C 75 13		L M76 5		5
L M7	M (Maj=N+2/N)			

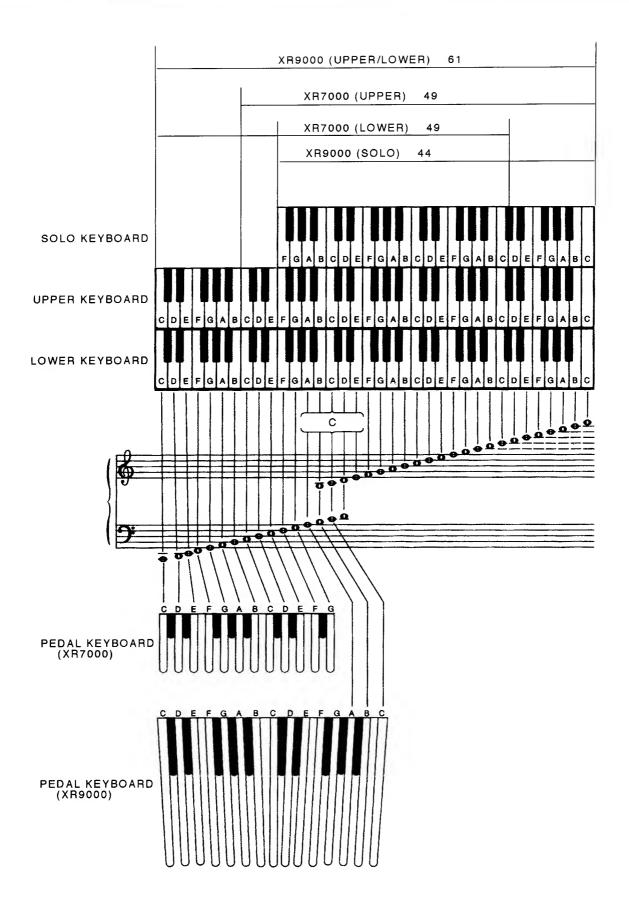
XR7000

_ m	C m add	_ m 7	[m 7b 5
m M 7	[9	L _m 5	dim

EFFECTS CHART

LOCATION	SOUND GROUP	EFFECT	ADJUST ???????
		SUSTAIN	15
PEDAL KEYBOARD	ORCHESTRA	KNEE LEVER	ON/OFF
	OHOHESTHA	TOUCH LEVEL	15
		OCTAVE	DOWN/NORMAL/L
		SUSTAIN	15
		KNEE LEVER	ON/OFF
	ORCHESTRA	TOUCH LEVEL	15
		OCTAVE	DOWN/NORMAL/L
		ENSEMBLE/CELESTE	ON/OFF
LOWER KEYBOARD		SUSTAIN	15
1		KNEE LEVER	ON/OFF
W	DDECET ODOUGOTDA	DELAY/FLANGER	ON/OFF
	PRESET ORCHESTRA	TOUCH LEVEL	15
		OCTAVE	DOWN/NORMAL/U
		ENSEMBLE/CELESTE	ON/OFF
		SUSTAIN	15
UPPER KEYBOARD	TIBIA DRAWBAR	KNEE LEVER	ON/OFF
OF ETTRET BOARD		PERCUS. BALANCE	15
		DECAY LEVEL	15
	ORCHESTRA	SUSTAIN	15
		KNEE LEVER	ON/OFF
		TOUCH LEVEL	15
		OCTAVE	DOWN/NORMAL/UI
UPPER/SOLO KEYBOARD —		ENSEMBLE/CELESTE	ON/OFF
(XR7000 – LOWER/UPPER KEYBOARD)		SUSTAIN	15
,		KNEE LEVER	ON/OFF
	PRESET INSTRUMENT	DELAY/FLANGER	ON/OFF
	THEORY INSTRUMENT	TOUCH LEVEL	15
		OCTAVE	DOWN/NORMAL/UF
		ENSEMBLE/CELESTE	ON/OFF
		PORTAMENTO	15
. N. N. J.		BENDER	DOWN/UP
PEDAL UPPER/SOLO KEYBOARD	SYNTHESIZER	OCTAVE	DOWN/NORMAL/UF
(XR7000 – LOWER/UPPER KEYBOARD)		DELAY/FLANGER	ON/OFF
		TOUCH LEVEL	15
		ENSEMBLE/CELESTE	ON/OFF
		SUSTAIN LEVEL	15
		KNEE LEVER	ON/OFF
ACCOMPANIMENT I/II		DELAY/FLANGER	ON/OFF
		TOUCH LEVEL	15
		OCTAVE	DOWN/NORMAL/UP
		ENSEMBLE.CELESTE	ON/OFF

PITCH REGISTER



XR9000/XR7000 PRESETS

1A 1B	Full Home Organ (XR9000 Bells on Synth Keyboard Full Home Organ with Strings and Chorus (XR9000 Only – Piano on Synth Keyboard)
2A 2B	Commercial Jazz Organ (XR9000 Only – Piano on Synth Keyboard) Commercial Jazz Organ with Fast Tremolo and Vocals (XR9000 Only – Muted Trumpet on Synth Keyboard)
3A 3B	Theatre Organ I (XR9000 Only – Piccolo, Bells on Synth Keyboard) Theatre Organ I (XR9000 Only – Piccolo and Flute on Synth Keyboard)
4A 4B	Theatre Organ II (XR9000 Only – Bells on Synth Keyboard) Theatre Organ II (XR9000 Flute, Soft Mallet Marimba on Synth Keyboard)
5A 5B	Organ and Guitar (XR9000 Oboe on Synth Keyboard) Organ and Vibes (XR9000 Muted Trumpet on Synth Keyboard)
6A 6B	Organ and 8' Piano (XR9000 Piano on Synth Keyboard) Organ and 16' Piano (XR9000 Horn on Synth Keyboard)
7A 7B	Pipe Organ (XR9000 Only/Chimes on Synth Keyboard) Cathedral Organ (XR9000 Chimes on Synth Keyboard)

If this equipment causes interference to radio or television reception, then try one or more of the following measures:

- Relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into a different electrical circuit from the receiver.
- Consult your local authorized Kawai Dealer.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.